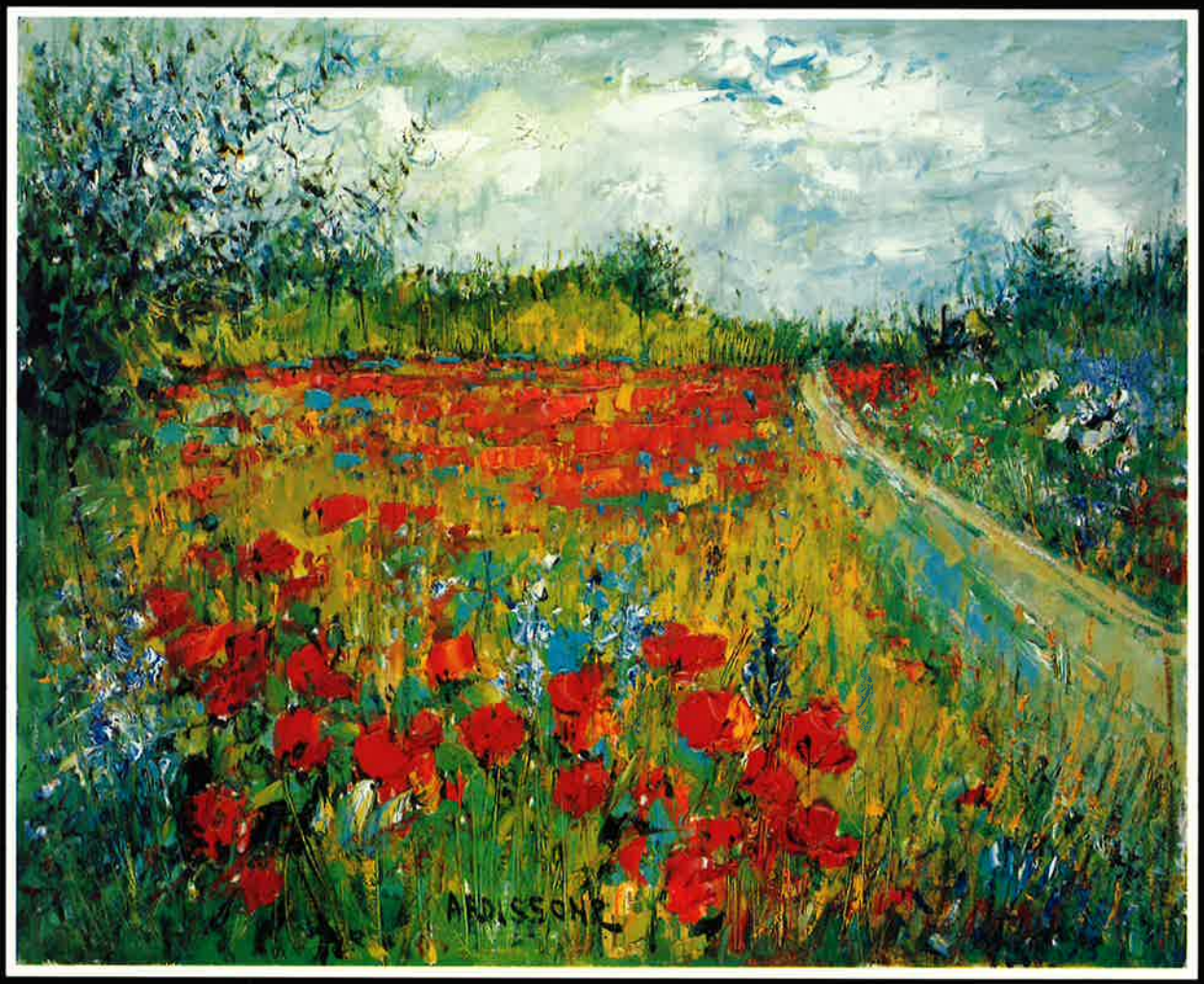
Annual Report



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CAP GEMINI SOGETI
EXPERTISE IN INFORMATION TECHNOLOGY®

Annual Report
Cap Gemini Sogeti
1991

International Edition

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pull-out under back-cover flap.

cover photo:
Cornflowers and red poppies

CAP GEMINI SOGETI
EXPERTISE IN INFORMATION TECHNOLOGY®

Corporation with capital of FF 1,498,911,000 - Corporate Registration: Grenoble B 330 703 844
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Letter from the Executive Chairman

On October 1, 1992, we will celebrate the 25th anniversary of Sogeti, parent company of the Cap Gemini Sogeti Group (created in 1975). I am certain the evening will be a festive one, with sincere congratulations exchanged all around. Yet, here I am, just a few months short of this event – and for the first time in a quarter of a century – talking about a year that ended with lower profits and fewer employees than the preceding one. As it turned out, after 23 years of uninterrupted growth, 1991 marked a break in what had been such an attractive upward curve.

Of course reasons abound as to why this occurred,* the economic crisis being first among them. Earlier recessions had left our business relatively unscathed, and there was a comforting explanation for this: even during uncertain periods, companies continue to invest in information technology, since it is an investment which enables them to increase their competitiveness and therefore maintain an edge over their rivals. But this time it did not hold true, mainly because three elements are conspiring in this crisis, whereas they did not in the others.

- **First, it is general.** Not a single industrialized nation has been spared, not even Japan or Germany, which is suffering from the after shocks of its two-year-old decision to reunify.
- **Second, it is deep.** It touches every economic sector.
- **Third, it is lasting.** It began in the middle of 1989, and no one can really promise that it will be over before the end of 1992.

Nevertheless, all recessions eventually do come to an end, and information technology – so vital, even indispensable, to the running of our economic machine – will then be able to

*See, for example, the Board of Directors Report, presented to the General Shareholders' Meeting, on the impact of Hoskyns' acquisition on 1990 and 1991 group profits.

take advantage of the general trend. The temptation, then, would be to dig in our heels and wait it out, once having made the adjustments necessary in such circumstances: cutting down on technical staff, lightening the organization, maintaining a minimum growth level through acquisitions rendered less expensive by the destabilization of less solid competitors, and so on.

But at the heart of this recession, which is affecting everyone, lies another crisis, one that is striking the IT industry itself. And this crisis may be described or analyzed in a number of ways:

- It is no longer necessary to explain why technological evolution is a critical factor in this industry (I already commented on this subject in the 1989 Annual Report). It is enough to keep in mind that, with rare exceptions, computer potential is way ahead of actual user needs and that, far from slowing down, technology continues its rapid advance.
- The predominance of software in relation to hardware will only increase from year to year. Although this factor basically works in favor of computer service firms, two negative consequences nonetheless emerge: The manufacturers and service providers, who once enjoyed a complementary relationship, are turning into rivals; and new competitors are being drawn into the IT services market (the large accounting firms, for instance, or the telecommunications operators).
- As a result of miniaturization, greater ease of use, reduced costs and the arrival in the business world of a generation fed on computers right from the cradle, information technology has inevitably become part of the economic and social fabric of our lives. But in so doing, it has taken exclusive control of this technology out of the hands of IT managers, the traditional clients of the manufacturers and service firms alike, requiring them both to change their offerings, their sales organizations, their production methods, etc.
- The general slowdown in the economy has turned decisions made in an earlier climate of strong growth into critical, "do or die" issues. At the same time, with the benefit of experience and threatened by the recession, users have become both more demanding as well as more cautious.
- Competition, which has always influenced the quality of service (innovative offers, fulfilling proposed solutions, meeting deadlines, reliability, guarantees, etc.) is now weighing more heavily on costs. And this price pressure – combined with the sometimes irrational tactics that such periods of crisis may bring about – is lowering margins and accelerating the process of concentration. There are those who foresee the takeovers or declining fortunes of some of the well-known players as a portent of still worse to come. But the phenomenon is not new, and may even serve to "purge" the market of the bad players – who are paying for their mistakes – while benefiting the stronger companies which know how to survive.

There are many other explanations for the crisis in the IT industry, and the trade press keeps on printing them, *ad infinitum*. Some will see it as a sign of the coming of age of an industry which has known nothing but double-digit growth; an industry whose managers have never really had to fight, and who may now be somewhat unsettled – even ineffectual – under these less favorable conditions. Others see the situation as temporary and regard it as a kind of "refresher course" which will allow for future recovery on a more sensible, solid foundation.

I will resist taking sides in this debate. A company should not be concerned with writing history, but rather with not giving in to it. Within the group, in any case, there has always

been a "gut" rejection of the attitude which holds *others* responsible for one's own problems. The only acceptable response is action. And Cap Gemini Sogeti's many corporate actions over the last year or two (and which will continue this year), have been specifically aimed at meeting the new challenges arising from this dual crisis. They include:

- buttressing the group – whose shareholders have been increasingly less able to meet its serious financial needs – with a powerful industrial partner (Daimler-Benz), whose own internal computer services development strategy recommended strong cooperation with a multinational company such as ours. This partnership was in line with other actions that had gone before, aimed at increasing Cap Gemini Sogeti shareholders' equity. The outcome of all these operations during 1991 was an addition of FF 4.2 billion to the net cash of Sogeti/Cap Gemini Sogeti as a whole.
- adapting the group's resources to the economic situation without in any way mortgaging its ability to face the recovery once times are better.
- instituting a plan in the summer of 1990 (almost two years ago now) to completely revamp the group's traditional organization – which one journalist recently compared to the Roman legions (and which dates practically from 1967). The new structure will be geared to the internationalization of the market and the globalization of our clients' demand. It will be implemented gradually over the second half of this year, to be actually unveiled on that highly symbolic date, January 1, 1993.
- focusing on research and innovation efforts in a number of technical areas, but also in marketing, human resources management, methods, software production processes, etc.
- enlarging Cap Gemini Sogeti's customary range of services: upstream, with the creation of a management consulting group currently employing nearly a thousand consultants, which didn't even exist two years ago; downstream with our impressive entry into the facilities management business, which already represents nearly 15% of the group's revenue (as opposed to zero two years ago). This latter initiative is in direct response to a concern expressed by many companies which want to refocus on their own core business and let others manage what for them are only ancillary activities.

All these actions call for considerable investment, as much in terms of management time and energy as in actual financial outlay. But they are part of a strategy that remains unchanged. They are also part of a new competitive environment in which size (of projects, risks, investments and even the company itself), universality, financial stability, cohesiveness and consistency are the primary assets. Cap Gemini Sogeti has these assets well in hand, and I know that the efforts undertaken over the past two years will make it possible to strengthen them still further. I know, too, that out of this difficult time we are going through now – and which we probably had to go through one day or another – an even stronger group will emerge, ready to face its second quarter-century of life with renewed confidence and commitment.

Grenoble, April 12, 1992
Serge Kampf

Village of Gualtieri


ARDIGSONE

Outsourcing

What could the American firm, Kodak, and the Japanese auto industry possibly have in common? A manufacturing activity? A product line? Shareholders? Technologies? None of the above! The answer must be found elsewhere. Both are past masters of "outsourcing," Kodak for management of its computer resources, the Japanese auto industry for parts procurement. This concept, born in the U.S., harbors a principle of industrial organization by which one company buys needed products, skills or services from another company, rather than resorting to an in-house solution.

While outsourcing is a very old custom – traces of which date from centuries ago in the construction or shipbuilding industries – its novelty lies in an expanding awareness of the economic advantages accruing to corporations that make use of this resource. For businesses, the debate between "making" and "buying" grows out of the combination of two factors: competition, which is driving companies to refocus on their primary line of business; and the market availability of a replacement offering capable of handling, under optimal conditions of quality and cost, any activity excluded as a result of this refocusing.

In a sector as fertile in innovation and intelligence as information technology, it is only natural to see the development of powerful companies like Cap Gemini Sogeti, which have brought together the skills and methods required to provide users with outsourcing solutions matching their needs. The aim of the following report is to show that for these users, outsourcing is at once the best response to market pressures (Section 1) and a key to performance in information systems management (Section 2).

Outsourcing: the best response to market pressures

In contemporary economic parlance, the expression "not invented here" is no longer used, because companies are turning more and more to outsourcing as a means of improving their performance.

For companies, outsourcing is the response to a market requiring them to be simultaneously global and local, to react quickly to challenges, to master complexity and to refocus their energies on their own business.

To be globally local

After many years as a local activity, trade became global in scope, and then both local and global at once. This is the price of the remarkable advances seen in the West since the 1950s. During this period of relative peace, technicians have scored remarkable achievements in telecommunications and transportation, the media have brought people closer together and delocalized events which are now viewed live by hundreds of millions of television viewers, creating an "economy without boundaries." Under the influence of worldwide brand names (IBM, Coca-Cola, Sony, Mercedes-Benz, Levi's, etc.), and mass sports and cultural events, the internationalization of taste has become a fact of life. Optical fibers carry products, ideas and money across national borders at the speed of light. A new perfume, a car, a movie or a Michael Jackson album is unveiled across the globe in a single instant. This internationalization is causing a total change in corporate life. Producers, distributors, professionals in the services industry – everyone involved in the creation of an intangible or material product consumed on a global scale – have to keep step with their customers... or risk falling by the wayside. It was this phenomenon that made audit firms, advertising agencies and express delivery services – among others – cross the Atlantic during the '60s in the footsteps of American multinationals then setting up shop in Europe. Just as, a few years later, the Japanese auto industry came to conquer the New World market with subcontractors in tow.

Nevertheless, globalization does not mean uniformization. In one of those seesaw motions to which only history holds the secret, managers have been confronted with a twin paradox: the more blurred national boundaries become, the more importance regions assume; the more products lose their national identity, the more consumers expect them to have personality. Bernard Cathelat, a specialist in consumer behavior analysis, sees Europe as a federation of 78 homogeneous regions of consumption, harboring individual local preferences and tastes. "Swatch" and "Rolex" watches appeal to specific socioeconomic lifestyles which reappear in different countries. Global markets are split horizontally by criteria of age, geography, income, reading or TV viewing habits. This is the law of scientific marketing, where intuition

The rooftops of Belle-Ile

"We have become citizens of the world thanks to the circulation of information," says Kenchi Ohmae, author of *Business without Boundaries*.

is tinged with mathematics. The increasing segmentation of the media is an infallible indicator. In the United States, for example, the prime-time audience share of the three big national networks – ABC, CBS and NBC – fell from 90% in 1989 to 65% in 1990, the difference being picked up by cable networks with more narrowly-targeted programming. The borderless economy is becoming a checkerboard market made up of transnational micromarkets. And manufacturers are being faced with a fresh dilemma: the more globalized their activity becomes, and the more localized or personalized consumption grows, the more they must learn to make limited production runs on a large scale. They have thus entered what Sony Chairman Akio Morita calls "global localization."

This "global localization" is forcing corporate decision-makers to:

- Define a clear mission, distinguishing strategic activities which must be conducted at both these levels from those which must be conducted at only one, in order to establish a position of global and/or local leadership.
- Develop organizational and operational principles geared to provide substantial autonomy to local units, extreme flexibility for resources (human, financial and technical); and international management systems dedicated to individual product lines or activities.
- Adopt a tougher approach to competition which, linked to the interdependence of economic situations, is accelerating sector-based concentration and stimulating the segmentation

The company of the '90s will have to become a real factory of new ideas over which no single player should have a monopoly, but where everyone will be able to claim credit.

of market supply; thus the differentiating factor is no longer the actual product but the service which accompanies it (thereby facilitating the emergence of "close-up competitors").

- Master information technology, for coherent and efficient processing and transport of the increasing share of intangible resources generated by the scattering of research, production, distribution and management activities throughout the globe.
- Establish priority ties, through outsourcing, with partners offering the proven endurance, international presence and professionalism required to supply high-quality products and services (e.g., computer services) wherever needed, and to facilitate their local integration.

Inn of the golden gorse

Quick reflexes

Long the hallmark of sports achievement and technical performance, speed is a dominant feature of today's lifestyle. To the individual, it is synonymous with "ease." Examples are plentiful: in transportation, with the development of high-speed trains, which may reach over 250 mph (402 km) in the near future, and which are already the most efficient means of linking many large cities; in telecommunications, with the success of cellular telephones and portable fax machines, which will be used by one out of ten Europeans by 1996; in the food industry, with the proliferation of fast-food outlets or today's enthusiasm for microwave cooking; in "instant" services such as photo developing, duplicate key fabrication, mail-order shopping, travel, ATM cash withdrawal, etc. In fact, today's rules of marketing seem to suggest that the only way to satisfy consumer impatience is to set up an around-the-clock distribution network!

The economy of speed is imposed upon companies as a result of permanent changes in their environment.

For businesses, this economy of speed is the result of changes in their political, economic, social, marketing and technological environments. Keep in mind that the clash of communism and capitalism, which dominated world events for over a half-century, was swept away in 18 months. In the field of logic – the foundation of innovation in computer science – more discoveries are being made in a single year than during the entire period from the death of Aristotle to 1950. The rules of the marketing game, laid down by the speed of change among customers and competitors, are establishing

The war of change supplies the weapons of competition: innovation, productivity and flexibility.

heretofore-unknown performance criteria. Just imagine that a new-model "notebook" computer – over 100 million of which are projected to be sold in Japan alone between now and the year 2000 – can be assured of maintaining its competitive advantage for only three months! This acceleration of the rate of change is a sensitive matter, not only because it calls traditional forms of management into question, but also because resistance to change is natural in any human organization – and particularly among firms governed by centralism, rationalism and outmoded production-line structures.

The war of change is following the same path as innovation, productivity and flexibility.

Innovation

Innovation is everywhere: in products, in methods, as well as in people's behavior. MacDonald's opens a new fast food outlet every 17 hours! In its ninth year of existence, Sun – which manufactures RISC-based workstations – is already turning out its ninth-generation product. According to a survey of the CEOs of the most forward-looking French industrial corporations, the main cause of this race to innovate is market pressure (60%), far ahead of technology (26%). Running in front of the pack means introducing more new products more frequently. How? Shortening the development cycle will reduce related costs, which can amount to 8% to 10% of sales in the IT industry, in contrast to 6.3% for the 500 largest companies worldwide. Optimizing researchers' working methods through the use of appropriate IT tools (CAD, CAM, CIM), or specially-designed "groupware" programs to facilitate work involving a number of people, can result in a 90% time advantage (according to an ongoing experiment reported by *Fortune*). Outsourcing is another possibility. The Big Three – GM, Ford and Chrysler – take half again as much time

and twice as much money to introduce a new model as do the Japanese, who (as shall be seen later) are creating the conditions for rapid response through the systematic use of outsourcing.

Productivity

Competitors are differentiated by their productivity. Toyota, for example, has reduced the time required to turn out an automobile to 13 hours, as opposed to 19 hours for Honda. How? By automation, but especially by a great deal of thought about the work process and human motivation. An untapped reserve of performance lies in white-collar productivity. The U.S. Bureau of Labor Statistics has pointed out that, between 1979 and 1990, productivity increased by an average of 4.1% in industry, but only 0.2% in the service sector. Banks, insurance companies, consulting firms, advertising and travel agencies are today experiencing the same ills as their industrial counterparts during the 1980s. Gains must be made in productivity, but what approach should be taken when intellectual capital becomes a company's most valuable asset? Tomorrow's winners will be the companies that were able to exploit their researchers' brains, the results of their research, the creative potential of their teams and the ability to effectively outsource their IT resources.

Flexibility

Organizations must remain flexible if they are to keep a watch on the market and seize opportunities as they arise. Flexibility is the only way to give individuals the autonomy without which creativity and performance vanish. The recipe for flexibility includes: flat structures in which levels of hierarchy are kept to a minimum (there are more than 10 in many large multinationals); severe limitation of administrative personnel in order to eliminate any form of bureaucracy; **strong integration of information systems** which (according to an Arthur Andersen study) would reduce delivery times by 40%, logistical costs by 30% and accelerate inventory rotation by 30%. Finally, there is **outsourcing,** which gives a company the flexibility to expand or reduce its production capabilities.

Mastering complexity

Complexity is everywhere

Given the effects of internationalization and change, management today means management of complexity. And complexity is surfacing everywhere: in the "hyperchoice" demanded by consumers, for example, following the pattern of that very narrow segmentation described above, which forces manufacturers to perform nearly unimaginable feats. The largest Japanese bicycle producer has moved from a 20-model catalogue to one containing over 11,231,862 options *(Insight)*. Reebok, the world's second largest manufacturer of sports footwear, is offering 175 models in 450 different colors and styles, its selection somewhat narrower than that of its competitor, Nike, which lists over 300 models in 900 styles. All are illustrations of mass consumption that can only be managed by computers. Moreover, complexity resides within the products themselves. A household iron involves over 63 different technologies. An automated teller machine runs on software containing 780,000 lines of code, and represents the work of 130 people over a one-year period at a cost of $15 million. The software for a supermarket cash register seems much simpler in comparison, as it represents only 58 programmer-years of work. Complexity may also be found in the structures or processes required to manufacture a wide variety of products on a global scale. In large organizations like the energy conglomerate Asea Brown Boveri (ABB), which must manage over 1,000 units in 145 countries, or Boeing, which sends 15,000 messages daily to its customers and suppliers, information takes on extreme complexity. Only by **total mastery of large information systems** can companies confront the difficulties raised by such complexity.

Information technology is the only way to handle "personalized mass production."

Confronting complexity

The drive to solve the most complex problems (e.g., the functioning of the human brain); the great challenges of social economics (implementation of huge Europe-wide programs for standardizing the VAT, customs duties, cross-border travel, etc.); the worldwide interconnection of computers; the diffusion of technology into products and management processes; the simultaneous search for standardization, security and integration: all these factors contribute to the complexity through which information technology must blaze a trail. In accordance with Ashby's law, which states that complexity may be managed only by complex systems, the required management, decision-making and information tools are themselves becoming increasingly sophisticated.

Take the Amadeus flight reservation system, for example. It stores 55 million continuously-updated ticket prices and handles 150,000 queries per second, for which it consults the equivalent of 341,000 volumes taking up four miles of shelf space. Was it pure chance that the airlines – the main users of this computerized service – wished to entrust its implementation to a specialized outside partner?

Refocusing on a line of business

Successful companies share a common denominator: they focus on their basic line of business. According to a study by A.T. Kearney of companies showing the best performance over the past 20 years – 2,250 Triad member corporations, selected because, between 1970 and 1990, they showed a return on net worth exceeding the cost of capital – have been concentrating on one or two lines of business carried out worldwide. Rhône Poulenc's sales rose from $7.5 billion in 1986 to $16 billion in 1991, while its catalogue of activities shrank from 120 to 50. In the same vein, Schlumberger eliminated its Fairchild components product line, Philips relinquished its IT activities to DEC and IBM discontinued its printer products. These companies all had a single idea in mind: to concentrate on innovation in products and production methods, and to make intensive use of information technology to enhance performance levels.

The fact that outsourcing was conceived as a real strategic alliance between contractor and subcontractors is the secret of its success.

By divesting themselves of portions of their activity or entire arrays of skills – which are still needed in other areas – these players are then obliged to establish alliances with partners or engage in intelligent outsourcing policies. Alliances are very effective when it comes to sharing research costs (Apple-IBM agreement), manufacturing and distributing products, or supplying related customizing or maintenance services. But when competitiveness joins forces with reactivity and specialization, even the most powerful groups recognize that they cannot be self-sufficient. The IT industry has been made aware of this fact in the recent past with the proliferation of agreements between firms such as DEC and Microsoft, IBM and Siemens, IBM and Bull, Alliance-ACE, and so on. If outsourcing is developing at such a rapid pace, it is because its use falls within the logic imposed by redistribution of the international division of labor. From a macroeconomic standpoint, history has shown that all efforts by nations to become self-sufficient in the production of goods and services have led to failure. Worse yet, these efforts have invariably led to a degradation of the economic performance of the countries involved. The difficulties experienced by Eastern Europe are only one of the most recent testimonials to this fact.

The Japanese example

A common practice in the auto, electronics and electrical industries, outsourcing is one of the pillars of Japanese management, on a par with "Just in Time" and "Total Quality Control." In 1950, Nissan and Toyota together were manufacturing just over 1,300 vehicles annually, while Japanese highways were crowded with American or European cars. Forty years later, the Japanese auto industry is supplying over 30% of the vehicles sold in the United States. The secret: **outsourcing, conceived as a real strategic alliance between the manufacturers and subcontractors.** This policy has enabled the manufacturers to concentrate their investments on design, research and assembly (and not on industrialization of parts), to increase productivity, to lower unit costs and to stimulate the entrepreneurial vitality of an immense network of craftsmen. Observing that software products, like automobiles (which are made up of 10,000 to 20,000 parts), are built from sub-assemblies, the Japanese have been quick to apply the principles of outsourcing to the software industry, as well as to the electronics sector as a whole.

Today, despite General Motors' declared intent to increase its proportion of outsourced parts from 45% to 55%, that company still has a long way to go before it reaches the levels currently practiced by Nissan, Toyota and Honda, which exceed 80%. Beyond the socio-cultural factors which encourage a "buyer" mentality in Japan, the difference in the effectiveness of this policy is undoubtedly linked to the way in which relations with subcontractors are managed. Japanese manufacturers have developed an authentic outsourcing policy, the key factors of which are:

- a four-level structure which distinguishes among subsidiaries (the partners of choice), "ordinary" partners and suppliers, each operating under rights and obligations which become more or less strict depending on proximity to the contracting firm;
- a limit on the maximum number of subcontractors that each level can manage, in order to

In outsourcing, companies delegate certain operational functions or even entire specialities, while they turn their attention to their own areas of expertise and excellence.

Nissan, Toyota and Honda are buying more than 80% of their spare parts from outside suppliers.

avoid the excesses of a company like General Motors, which has ties with over 9,000 suppliers;

• collaboration based on mutual confidence, a reciprocal exchange of expertise, constant striving for productivity (a gain of 10 points annually), and systematic analysis of quality, costs and performance.

An intelligent outsourcing policy

The Japanese example shows that, to surmount fluctuating cycles of recession and prosperity, manufacturers should manage their production resources by drawing on the support of a number of autonomous, dynamic entities. The level of sophistication needed for "personalized market production" methods and the search for economies of scale are leading to an increasingly greater division of labor between the contractor and small specialized companies. Placed in the hands of enterprising managers, these units are proving to be more innovative in product development, manufacturing processes, marketing methods and personnel management... all to the greater benefit of customers in terms of price, quality and – above all – speed of response. Given the positive results of these experiments, companies have committed themselves to an outsourcing logic, seeking to convert non-strategic activities into subsidiaries, or sometimes even to transfer control of them to their employees. This orientation reflects the belief of many managers that it is easier to work efficiently with outside service providers, frequently more mobile and motivated than their in-house counterparts. Still, they must deal with the notion, widely held in Europe, that outsourcing is based on relationships of domination and dependence. The most effective examples demonstrate, however, that outsourcing really involves more of a partnership, combining a spirit of cooperation and competition, a willingness to absorb new ideas, the definition of goals and the sharing of profits. In this sense, partnership is the most successful form of outsourcing.

Many managers share the same conviction: that it is easier to work with external service providers, often more mobile and motivated than their internal counterparts.

The spread of outsourcing

Outsourcing is gaining ground in every economic sector and in all corporate functions. Every year, for example, Benetton distributes 50 million items to 4,000 points of sale scattered throughout 60 countries. Unprecedented in this industrial sector, operations of such scope require the use of outsourcing and large-scale data processing. In fact, Benetton's manufacturing activity is supported by a network of subcontractors numbering over 25,000 people worldwide.

Applications of outsourcing are numerous. As of 1989, IBM has delegated management of its 21 spare parts distribution centers to six outside service providers, including Federal Express. When Unilever decided to create an IT network linking all of its European subsidiaries, it, like Eurodisneyland, entrusted design and management tasks to an outside service provider. At the initiative of British Telecom, the European telephone carriers – Eunetcom (for France Telecom) and Deutsche Bundespost – decided to set up a joint company, Syncordia, to aid the big multinationals by offering high-performance outsourcing for their private telecommunications services (voice, data, graphics); this involved a market worth tens of billions of dollars. Outsourcing is also penetrating professional IT services such as maintenance (25% of this activity is being conducted by specialized companies); strategic, organizational and communications consulting; legal counselling; data processing services; logistics and internal auditing; even TV program development, which is generally turned over to outside producers.

From maintenance to staff cafeterias, and even venturing into TV film production, outsourcing is gaining ground in all business sectors.

Outsourcing: a performance factor for information systems

As a key competitive resource, information technology can be managed more effectively and make a greater contribution to corporate performance than in the past. This explains the current popularity of IT outsourcing.

Because of its prominent place within the company, an IT system – which coordinates all the techniques required for optimal control and use of the flow of information – is a natural candidate for outsourcing. This is, after all, an old way of using IT resources adapted to current challenges.

A new "old way of buying"

Some history

IT outsourcing is not a child of the 1990s. Rather, it took shape at the beginning of the 1960s when, under the pressures of customer demand, the practice of unbundling imposed on American manufacturers, plus the entrepreneurial dynamism of a few individuals, the first software service companies made their appearance. Among the best-known were EDS, ADP and Computer Sciences in the United States, and Volmac, Logica, CAP, Programator, Sesa, Hoskyns and Sogeti* in Europe. From then on, their objective has been to assist companies in developing the operating or management software needed to run their computers. This was actually the birth of IT outsourcing. The offering generally took the form of technical assistance – i.e., the provision of analysis and programming skills – or service bureau operations. With the expansion of information technology, these companies organized themselves in order to supply users with:

- a complete offering of processing and assistance to operations, including service bureau and facilities management;
- major processing centers which, at the initiative of the large manufacturers or the independent companies which created them, successfully managed the accounting, payroll and billing operations of many client firms for a number of years;
- operation of private telecommunications networks by professional specialists;
- supply of all services related to custom software development, such as consulting and assistance, systems design and implementation, development of basic software or program products for general distribution, large project management, training, and data entry or maintenance operations.

Over the last thirty years, the market for outsourcing has continued to grow at a rate that has exceeded the most optimistic forecasts of those who, at the time – and there weren't many – believed most strongly in this new activity. The share of the worldwide IT budget allocated to software services amounted to 20% in 1970,

* In 1970 in Lyon, for example, Sogeti created one of the first existing facilities management companies in Europe, known as Eurinfor (for Européenne d'Informatique).

Flowers on Mikonos

as compared to 55% in 1990. This growth, which is outpacing the rest of the industry, may be explained by the success of Unix-based systems, facilities management, software engineering, systems integration and network services.

What does the concept of IT outsourcing cover today?

Either as a consequence of its success, or simply because it has become a widely used expression, outsourcing for information technology is subject to varied interpretations. Some people limit the term to facilities management services, which involve taking over the management of all or part of a company's IT resources (computers, software, personnel, facilities) for a specified period of time with a commitment to performance. Others use the term to refer to all subcontracting services required for the smooth functioning of information systems. Which is correct? The example of the Tower of Babel is a reminder that many misunderstandings can be avoided by a prior definition of terms; thus, some attention to semantics is in order here. The concept of outsourcing reflects a reality: it is a subcontracting activity defined as "any business practice in which a producer tasks another firm to undertake a part of its manufacturing process or to supply sub-assemblies to be incorporated into the final product" (J.Y. Westing, *Industrial Purchasing)*. Straining through the many facets of this definition, it seems to narrow the application of outsourcing to facilities management alone. In fact, however, it is applicable to any service rendered by an outside provider within the framework of a commercial relationship – falling anywhere within the gamut from assistance to full responsibility – and designed to improve the effectiveness of a company's information system. Over the years, these activities have undergone many transformations before structuring themselves into three major families:*

- professional services (consulting, software

Outsourcing covers all subcontracting activities which contribute to the efficient functioning of information systems.

* These activities are presented in greater detail in the second section of this report (page 37).

Outsourcing has become so commonplace that no one any longer debates the alternatives of "making" *vs.* "buying" but, rather, by what ratio the latter should exceed the former.

Fishing at Belle-Ile

development, maintenance and training services),
- systems integration,
- systems operations.

Outsourcing: a constantly changing offering

In biology, as in economics, everything that grows changes. So, too, the development of outsourcing has been accompanied by many transformations, from the manufacturers' standpoint as much as the service firms'. Viewing service as a factor which distinguishes their market offer from that of their competitors manufacturers are striving to increase added value by personalizing their components or drawing up their specifications to match user needs. At the same time, they are striving to move from limited mass production to a "mass market" fabrication mode, to reduce the burden of their internal structures and to hasten the changes in mentality required to sensitize their sales force to customer needs. Alongside these internal changes, manufacturers are placing great store in partnerships with service firms, partnerships that can assume a variety of forms: spot subcontracting agreements, joint development operations, strategic alliances, joint ventures, shareholdings, etc. Stimulated by this advance into their territory, by the globalization of requirements and by increasing competition, service companies are starting to move in three directions:
- **concentration** of forces among major service providers. The 10 leading European software service firms today hold over 15% of the market, in contrast to a 1985 share of only 9.5%;
- **formalization** of their methods, primarily through specialization by individual technology, line of business or sector of activity;
- **integration** of services offered, aimed at winning contracts which go beyond simple design of solutions to embrace delivery of complete projects or management of all or part of their customers' information systems.

This parallel growth of the service market's major players goes hand in hand with concern by users for new ways of managing their computer resources. It is the sign of a mature market that there is now an outsourcing supply, consolidated by the existence of large and well-known service providers. All of these changes reflect a sharp shift in the attitude of decision-makers toward the role of outsourcing. Initially an offer of capability, limited to providing analysis or programming skills or machine resources which customers used as they saw fit, these outside services have gradually evolved into an offer of specialized services, characterized by expertise very hard to find or maintain in-house, and indispensable to corporate performance. The originally circumstantial nature of these services has given way to a structural dimension. Outsourcing has become so universal by now that no one even debates the alternatives of "making" *vs.* "buying" but, instead, the relative shares of the two options. According to a survey in the U.S., 50% of large companies are on the threshold of increasing the percentage of their IT outsourcing and are contemplating complete facilities management solutions.

A solution to the new challenges of computerization

Information technology suffers from a double paradox: How can hardware manufacturers make money when an increase in sales volume does not equate to a lowering of prices? How can large users accept an endless increase in their budgets while the newspapers are reporting that prices are falling? Over the past twenty years, the price per MIPS ("million instructions per second," a measure of computer performance) has been divided by 100,000. This is why more and more decision-makers want to regain control over the cost of computerization: to get more for their money and to make information technology a competitive tool.

Indispensable to corporate performance, outsourcing has become a structural, rather than merely a circumstantial alternative.

Controlling costs

In his 1990 book, *The Business Value of Computers,* the American professor, Paul Strassmann, calculated that the OECD* countries had spent about three trillion dollars on data processing since 1954. The experts are currently predicting that the information technology industry should show annual sales of one trillion dollars at the beginning of the 21st century. In other words, in a single year, consumption will be one-third of what it was over the preceding 36 years! Figures like this might seem surprising or disturbing. The trend is clear, however: annual IT expenditures in France grew by a factor of seven between 1980 and 1990. On Wall Street, financial institutions saw their IT investments rise from 5% to 20% between 1985 and 1990. As a result, IT budgets, which

*Organization of Economic Cooperation and Development.

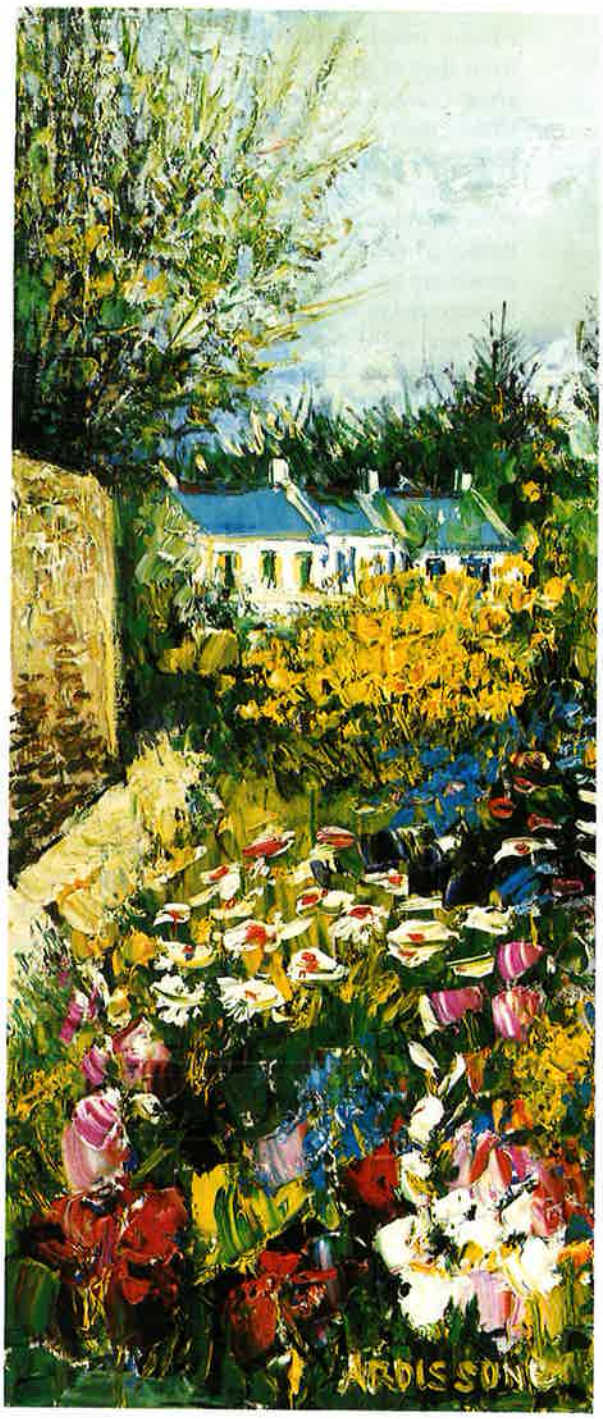
account for 2% to 5% of revenues, depending on the economic sector, are under the intense scrutiny of corporate management, more concerned about the uncontrollable nature of these costs than about the actual amounts.

Faced with these questions, behavior is changing. **In the first place,** companies are trying to be more precise in defining costs they had previously not even bothered to identify, much less calculate. But the task is not an easy one, as many of these companies lack management control tools suited for tracking their IT costs. Moreover, methods for calculating IT budgets differ depending on whether they include human resources management costs, allocation of leasing costs in relation to space used, communications costs, insurance premiums, etc. These evaluations become even trickier as decentralization scatters expenses among multiple decision-making centers. It is currently estimated that actual users receive about one-quarter of the total corporate IT budget. The Diebold Group is even more pessimistic. According to a survey published by *Office,* 64% of industrial user expenditures escape the attention of IT management, in contrast to only 27% in services.

In order to control IT costs, which consume from 2% to 5% of revenues, corporate leaders are adjusting their behavior as users continue to change theirs.

From another standpoint, companies are attempting to limit increases by downsizing their systems (the capacity to process 1 MIPS costs $100,000 on a mainframe, as opposed to $4,000 on a microprocessor) by means of "software re-engineering" (clearing away superimposed layers of software in order to extract the most frequently used kernels which show higher performance levels, use less memory capacity and are less expensive to maintain).

Finally, however, companies are making increased use of systems development outsourcing which, according to McKinsey, is less than half as expensive as the in-house implementation of an application. In addition, it requires one-third the time and one-fifth the personnel needed to do the job internally. **Outsourcing** offers the advantage of either genuinely mastering development costs within fixed-price projects or of generating billing, which varies as a function of actual consumption within facilities management contracts. By computing definitive costs or by paying for resources actually used, business leaders are in a better position to evaluate the performance of their computer tools.



Return on investment

More and more, buyers are putting a price tag on their information technology by asking

"Within five years, there will be two types of businesses: those that use their computers as marketing tools and those that go bankrupt." (Professor Warren McFarlen of Harvard – as quoted in the *Financial Times*.)

Flowers at Doelan

Waterlilies at Azay-le-Rideau

when their costs will be paid back. Without question, most IT systems are profitable. Take automated banking transactions, for example. For companies, these services reduce the cost of cashing drafts by 70% to 80%. For bankers, they are a source of increased productivity (30% to 40% on payment costs). Furthermore, they generate additional fees through charges on these services and provide marketing personnel with products geared to attract prospective customers. The ability of computerization to increase economic performance is not in question here, but rather the widespread inability to measure this capacity. The difficulty in evaluating the return on investment of information systems is related to the variety of methods used from one place to another, to the lack of reliable comparative data and to the relative immaturity of theoretical work on the subject. But according to Paul Strassmann, a specialist in the field, time should not be spent trying to evaluate return on investment (which measures only the past), but instead should concentrate on the contribution of information technology to added value. Like any other investment, major IT decisions should be evaluated on the basis of their effects on the company's line of business and its competitiveness, and not

on exclusively technical criteria.

It is clear that **software plays a key role** in this mastery of technology. It is software that makes it possible to enhance organization management, develop new ideas, transfer know-how or, more simply, circulate information. Corporate leaders are all the more sensitive to this fact as software and services outstrip hardware in company budgets. These managers are showing increased interest in existing systems, in their operating modes, in ways of improving their cost or effectiveness. They sometimes compare their own systems with their competitors'. Herein lies the advantage of applying the principles of value analysis to information technology, and specifically to software.* This industrial analysis is applied by setting up a relationship between the cost of a function and the array of services that it performs, with the natural result that only absolutely necessary functions are developed. In information systems, which are often extremely complex and will become even more so in the future, all the real work is performed by a single kernel, with the remaining array of features quickly becoming insignificant. Confirming Pareto's Law, 20% of a systems' features accounts for 80% of its yield. Value analysis results in a 20%-25% savings on development, documentation and maintenance costs. Not applicable without a commitment on the part of corporate management, this sort of approach presupposes a broad ability to call internal operating modes into question. This is why the process is easier to initiate within the context of an outside service, either at the time the bid is submitted or during the evaluation of functions managed under a facilities management contract.

Computerizing for competitiveness

Information systems help improve corporate performance through increased integration of decision-making, production and control systems, through strengthening acquired assets and through changes in the rules of the competitive game. After having automated existing tasks, information technology strives to "do things differently" and thus create a competitive advantage in the areas of sales personnel productivity, for example, or customer relations management.

According to Professor Warren McFarlen of the Harvard Business School, as quoted in the *Financial Times,* "Within five years, there will be two types of businesses: those that use their computers as marketing tools and those that go bankrupt." By investing in sales support systems, companies are aiming to increase their sales effectiveness, particularly by identifying good prospects; to optimize the number of sales calls, success rate and order size; to reduce travel, order-taking and delivery times, and the number of errors caused by an unfamiliarity with inventory; and to standardize proposals and coordinate the content of information in the possession of sales people with that contained in customer files. Often scorned as an added burden by the sales staff, information technology nonetheless improves their performance. An experiment conducted by Sun Life, a British insurance company, is proof of this fact: Insurance sales managers equipped with laptop computers increased their revenues 25% over those who stuck with conventional sales management methods. In standardizing these tools, insurance companies in general are turning to outside specialists. Hoskyns,* for example, is assisting many of these firms in systems deployment, user training and maintenance.

Because service is a key component of customer satisfaction, information technology must enhance the relations between customer and company. Sixty-eight percent of automobile buyers who change their make of car have been disappointed by the service provided *(Car and Truck Dealer,* 1990). It is easy to understand why over 30% of all large American corporations have – according to a study published by DEC – decided to install an information system for improved customer service. Some examples of what this involves: integrating customer files to provide a single, coherent picture of each client; ranking consumer buying motivation by geographic area through postal delivery code analysis; installing electronic resources to ensure a smooth information flow; promoting products; answering customer questions ("Helpdesk"); etc. In this vein, Federal Express is handling Commodore Business Systems' around-the-clock, after-sales service as part of its "Business Logistics Services" outsourcing activity, as it provides improved customer satisfaction at a lower cost.

After computerizing existing tasks, IT then tries to "do things differently."

* cf. book by Jean-Pierre Roccia of Cap Gemini Sogeti dealing with this subject.

* A company belonging to the Cap Gemini Sogeti Group, Hoskyns realizes just over 40% of its revenues (which in 1991 totalled £200.7 million) in facilities management. It is the uncontested U.K. leader in this field.

A determining factor in technology is

the will and the talent to use it.

Ardissone's studio

Efficiency through outsourcing

As already noted, corporate executives expect a high degree of efficiency from those to whom they entrust their IT solutions: in the way in which they attack the problems, handle change and implement the solutions themselves. Caught up in the conflicting issues of accelerating technology, setting increasingly ambitious goals for their companies, dealing with their existing systems and seeing a return on their investments, IT managers are turning more and more to outsourcing.

Formulating IT problems in a new way

Opinions converge on one point: information technology is a crucial factor in increased competitiveness. Still, most managers acknowledge that they don't take full advantage of it. The consensus seems to be that markets change but IT doesn't. "The cost and time requirements for modernization are astronomical," reported the *Financial Times* – quoting an English banker when presented with a plan for overhauling his information systems; not unusual in this sector, some of its components had been in operation for 20 years. To carry out his plan, he would have to spend several hundred million pounds and commit himself to a five-year renovation program! According to a study by Gemini Consulting, two-thirds of managers surveyed in the United States and Europe acknowledge that investments in computerization have resulted in an increase in performance of operations (manufacturing, logistics and distribution), customer satisfaction, management capability and productivity. But the aging of "central" applications and overloading of in-house development teams, factors which are confronting over one-half of the IT management of large European corporations, tend to diminish the effectiveness of information technology.

Perhaps information technology is the victim of its own success. The spread of microcomputer-based processing, together with local area networks, today account for four-fifths of IT expenditures, in contrast to one-fifth in 1985. This, combined with the emergence of a generation of youthful managers familiar with these tools, is taking the mystery out of technical know-how. As a result, the

cultural and linguistic barriers which have heretofore sheltered IT managers and enabled them to invest, without overly concerning themselves with the profitability of their investments, are starting to break down. Decisions will now be made more on the basis of criteria such as project innovation, economic profitability and speed of implementation. Confronted with rapid changes in their environment, decision-makers are often disinclined to interest themselves in the "nuts and bolts" of computerization. In the past, too much time was spent during management meetings debating this issue. Managers expect their IT personnel and their suppliers – who are participating to a greater extent in the management of their IT resources – to have in-depth familiarity with their business sector, the stakes involved and the improvements they might expect from the appropriate use of technology, all within the framework of a quickly-visible increase in performance levels. But managers count on outside specialists when it comes to adapting computer resources to the requirements and constraints of their business. Some even go so far as to say that they expect this outside expertise not only to answer their questions but also, and especially, to provide solutions to problems that they themselves have not yet identified. Only professionals who perform their jobs in a great many business settings have encountered enough different situations to be able to develop such capabilities. In a market dominated by speed, expertise is a guarantee of anticipated success.

IT decisions are being made in light of their economic benefits and their impact on a company's business.

Managing change

With the dual advance of computerization and the knowledge specialists have of the conditions governing its effectiveness, it becomes clear that alterations must be made in the way change is managed. In fact, following the modern concept of business re-engineering, which focuses on the interfaces between these disciplines, and not on the disciplines themselves, it is necessary to act simultaneously on strategy, the added-value chain, the information system and the management of change. This requires an iterative approach carried out by a multidisciplinary team made up of users, IT professionals and change-management specialists, if needed. A pooling of experiences helps to see a problem in its entirety, and to deal with the expected impact of any new technology on a company's performance. An incomplete analysis can negate the anticipated benefits. For example, projected profits from the computerization of tasks through the installation of automated teller machines have been completely offset by the added cost of processing the many small cash withdrawals generated by the introduction of this new service.

Managed change is positioned on a redistribution of roles between in-house IT agencies and outsourcing service providers. The former cannot fulfill their function without the support of the latter, while the latter are effective only with the strategic guidance of the former. As a consequence, IT management must refocus on four main missions: provide a liaison between specialists in technology and corporate management; integrate new technology into strategic plans; transfer technical solutions or know-how to company divisions; and maintain close ties with the scientific and higher education communities. In-house resources, 70% of which are currently assigned to the maintenance of existing systems, must be oriented toward analysis of requirements, process improvement, identification of strategic goals and technological "watchdog" functions. To do this, the IT department works in close collaboration with the external service providers in the design, development, management, implementation and maintenance of information systems.

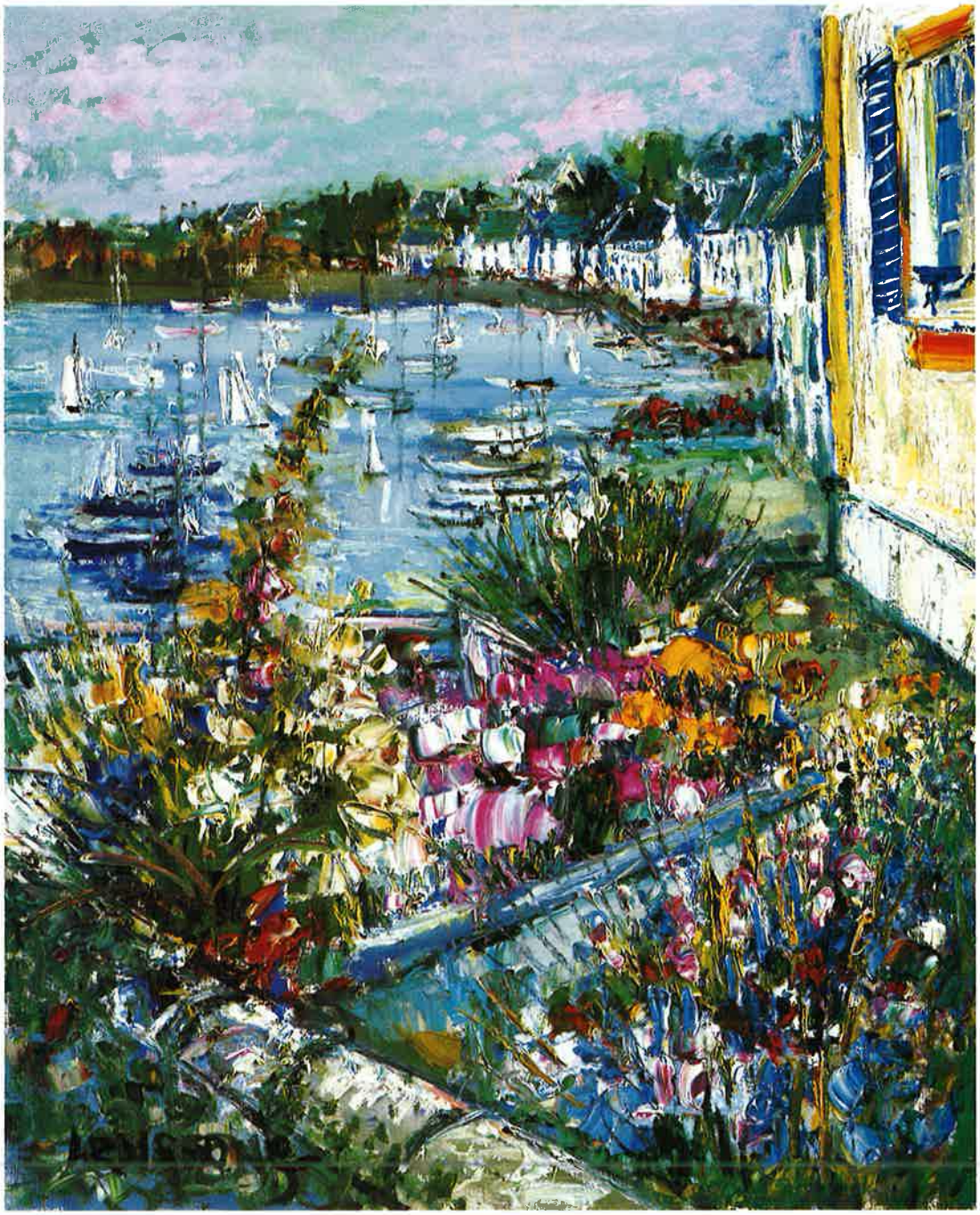
Software fabrication

Given the variety of applications – with automation penetrating into fields as diverse as knowledge modelling or quality control on industrial production lines – and the multiplicity of techniques and skills required for their implementation, corporate management and in-house IT experts are finding that **production methods are growing increasingly difficult to master.** They are naturally turning toward service firms capable of conceiving, designing, orienting and building solutions to the widest imaginable range of problems, under optimal conditions of time, quality and price. For several years now, these service firms have been investing in honing their skills within specialized market sectors and technical areas. They have also stressed the "cross-fertilization" of multidisciplinary teams able to handle a problem from all angles and from beginning to end. Likewise they have automated software production using knowledge-modelling techniques, through the implementation of existing software components and the development of software engineering systems, by formalizing their expertise with "proprietary" methods such as Cap Gemini Sogeti's *PERFORM* Quality Sys-

By extending a company's competitive reach

and strengthening exchanges and interconnections,

IT outsourcing acts as a catalyst to progress.



Terrace at Sauzon

"It is not unusual to hear service departments express the opinion that some of their partners did not live up to the high standards that had been expected of them."

(Pierre-Yves Barreyre, 1968)

tem, and with object-oriented languages. All this has served to improve software development productivity and reduce delivery times. These investments – which amount to about $100 million – have encouraged a growing number of companies to turn to outsourcing alternatives to achieve a competitive edge with their information systems.

Toward partnership

Paradoxically, the more complex user needs become, the less time they want to invest.

Information systems are going to play an increasingly important role in the success or failure of businesses, if only due to the growing need to speed up the circulation of information within organizations undergoing continuous restructuring. Fifty-four percent of American managers surveyed believe that they are not getting the information they need. To respond to this problem, IT experts and users know that tomorrow's systems will be making increasing use of sophisticated architectures interconnecting local area networks and distributing applications, data and images. Use of these technologies is the fruit of complex solutions, not simple applications. The more complex information systems are, however, the more they require know-how in fields as diverse as downsizing, client-server architectures, neural networks, fuzzy logic, robotics, expert systems, multimedia and so on. Today one no longer deals with single technologies, but instead with "complex multifunction systems" along the lines of "intelligent buildings," where computers control heating, lighting, telecommunications and security. Thus, managing technology is becoming a full-fledged job category. Companies are now looking for more than just an outsourcing alternative to their information systems; they are looking for turnkey solutions, even the complete running of their IT resources through facilities management. Like the 75% of European CEOs who believe that the future is compelling them to work in partnership with their customers in the conception of products and services, service firms are also applying this approach and investing in systems integration and facilities management activities.

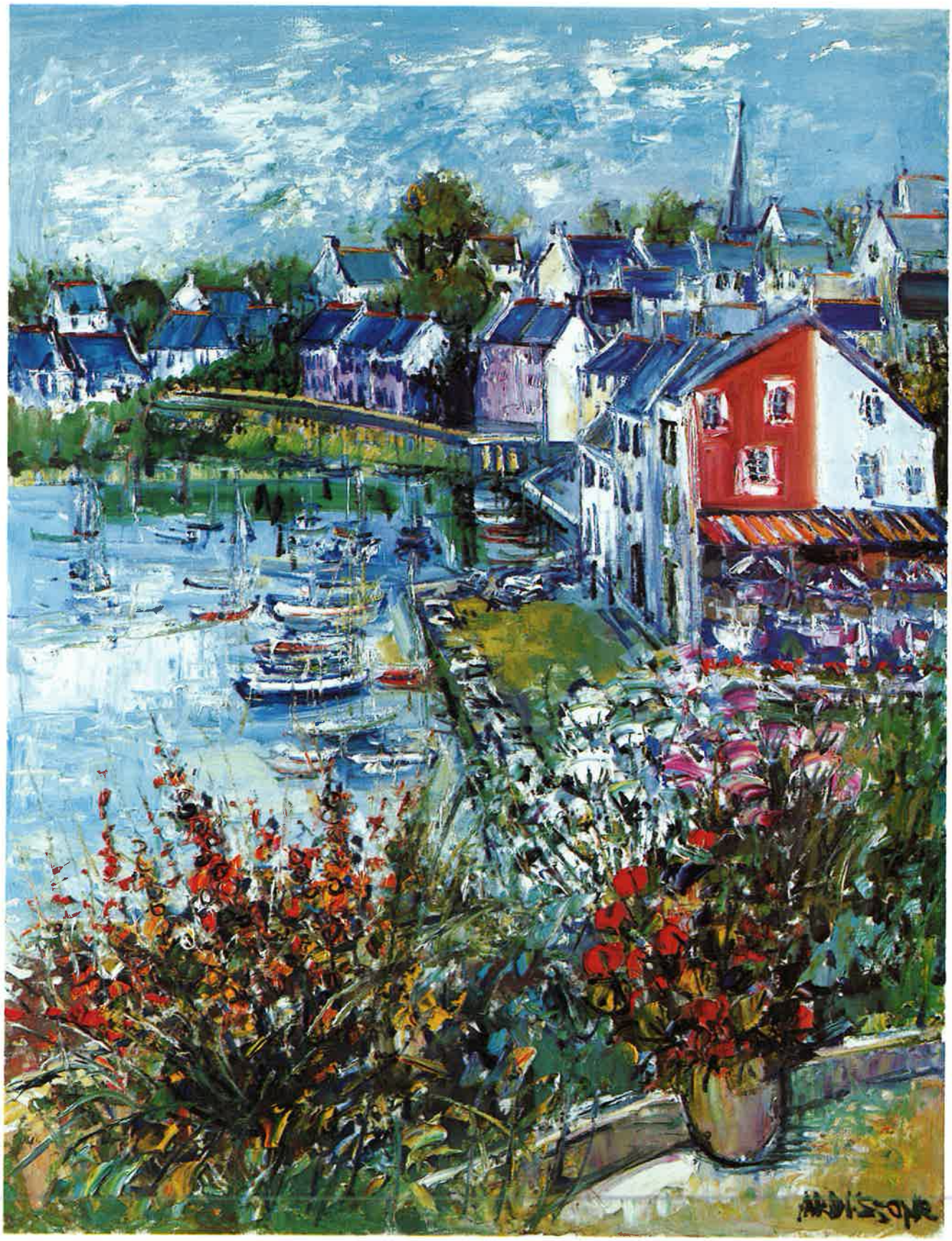
Each new day brings its announcements of contracts in which major user X has tasked supplier Y with development of an information system or management of all or part of his computer resources (hardware, software, facilities, personnel). Both parties invoke the same reasons for this mutually-satisfying relationship: cost reduction, control over technological innovation, specialization and availability of skills, adaptation to specific changes, data security and confidentiality, better human resources management, stability and quality of service. Beyond the specific details of each individual case, a clear trend can be observed: **The number and size of outsourcing contracts is on the rise.** Contract amounts approaching $20 million are no longer a surprise. In 1991, two dozen European and American companies closed deals involving amounts in excess of $80 million. All are casting their lot with medium- and long-term partnerships – a prerequisite if both parties are to benefit from the learning curve. For users, this assessment involves implementing a policy of cooperation with service firms based on some very simple principles: careful selection of subcontractors, a clear differentiation of responsibility between the contracting parties, and collaboration based on the quality of service, expressed in terms of response times, number of transactions, system availability, number of new functions, etc. In a nutshell, information technology is following a very natural tendency in which outsourcing is no longer viewed merely as a solution to a technical problem, but as a better-performing management technique.

Houses at Carnac

The breakdown of national borders, the personalization of consumer tastes, the need for instant reaction and a general climate of growing complexity: all are forcing companies to focus their attention on redefining their strategies, redesigning their products, streamlining their marketing procedures and mastering their information systems. By accepting the idea that they can no longer do everything themselves, leaders in industrial and service companies alike are gradually changing tactics, the former becoming "assemblers of component parts," the latter "assemblers of skills." As a result, business executives in the most diverse fields are involving themselves more and more in the techniques and resources required to carry out an intelligent outsourcing policy.

In any business, the intricacies of the information system penetrate right to the heart of its products and/or services, influence the flexibility of its internal processes and help its personnel to function more efficiently. Thus, company directors were very quick to recognize in IT outsourcing a more effective way to handle their human, material or logistical resources in the form of timely technical assistance or, in some instances, operations management. And it wasn't long before the growth in the demand, the diversity of customer needs and the appearance of large groups — such as Cap Gemini Sogeti — able to take all these considerations in hand, fostered a comprehensive outsourcing offer. This offer was built along three basic lines: IT consultancy and professional services, systems integration, and facilities management.

As a means of controlling costs, realizing a return on investments and designing applications that will improve competitiveness, outsourcing provides users with increased efficiency both in the way problems are tackled and in the way software is manufactured. Clearly, this solution is becoming increasingly popular, a phenomenon which may be summarized in a simple formula: "each to his own business, and information technology doesn't happen to be ours!" Every day, as computer service companies draw closer to their clients, a new chapter, entitled "Partnership" – or outsourcing in its most fully-realized form – is being written in the history of this very young profession. It is a chapter being written with enthusiasm by the thousands of men and women who have the great satisfaction of seeing their talent and expertise put to continually more widespread and inventive use. It is a chapter, finally, that is placing outsourcing in the very forefront of the great economic challenges of tomorrow.



View of Sauzon

Canal in Venice

An introduction to Cap Gemini Sogeti

Cap Gemini Sogeti is Europe's leading computer services and consulting company and one of the industry leaders worldwide. Located in 13 European countries and the U.S., the group specializes in professional software services, its ultimate goal being to help its clients reap the greatest possible benefit from their information technology resources.

Since its creation in 1975, Cap Gemini Sogeti has upheld a strong development policy, multiplying its revenues more than 45 times. In 1991, group **revenues reached FF 10 billion** for net income of FF 560 million. The total number of employees at the end of the year stood at 17,000 – 82% of them graduates of leading European and American institutions of higher learning.

In order to fulfill its development strategy, the group is depending heavily on its current strengths and assets, which will be described in the following pages. These include a complete IT offering, a constant search for innovation and quality, an organization adapted to its international scope, a motivated team of professionals and managers, as well as a highly productive collaboration with Gemini Consulting – a management consulting practice created in 1991 in association with Sogeti, the group's parent company.

A customized IT offering

As with many other economic sectors (the airlines, telecommunications, TV and video, etc.), the worldwide information technology (IT) industry has been struck very hard by the "intangible" aspects of software and services. Cap Gemini Sogeti has been anticipating these changes in demand since it was first created. And to meet these changes head on, it has used to best advantage experience acquired over the years through more than 30,000 project references to develop a complete service offering built around a triple capability.

An IT market supported by professional services

In 1991, the worldwide information technology market, including hardware, software and services, showed its strongest growth to date. This confirmed an event which occurred the previous year when, for the first time in the history of this industry, revenues for software and services outstripped those for hardware sales. The predominant role being assumed by services is the result of an incredible evolution in technology. Over the last ten years, for example, users have had at their disposal an increase in computer power of 30% to 40% annually, with no accompanying increase in cost. The consequence has been a radical change in user needs. Confronted with this flood of computer power, users are no longer limiting their requirements to the acquisition of technical skills (even though such skills are a prerequisite to any user-supplier dialogue). Rather, they are seeking to obtain the help they need to fully master their company's computerization processes, define their strategy, assume better control of their internal IT costs, seek competitive advantage, integrate complex systems incorporating very diverse tools and products, and so on. Thus, users no longer buy only skills; today, they are in the market for solutions and results.

A complete service offering

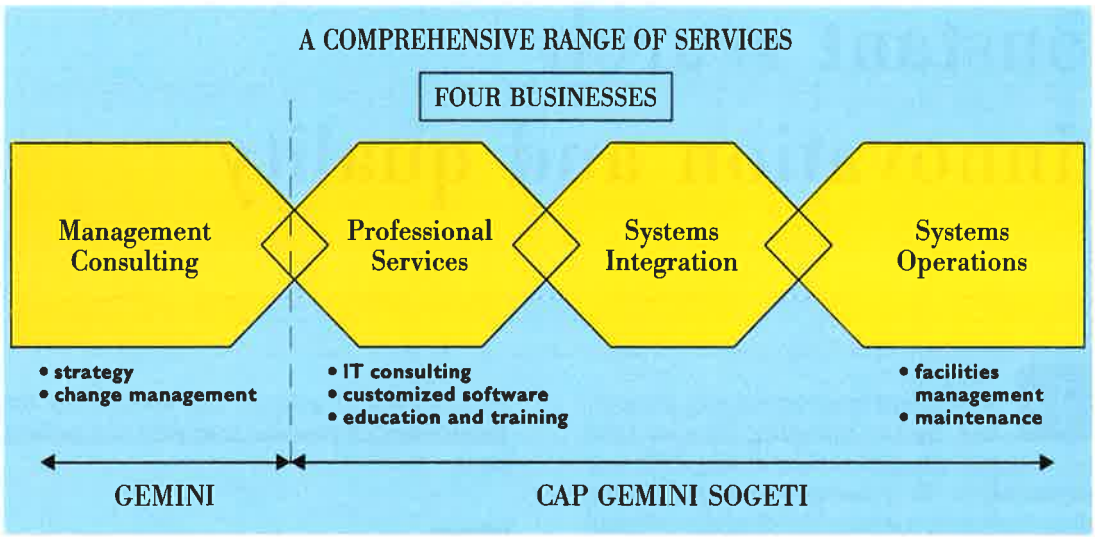
From its very beginnings, Cap Gemini Sogeti has specialized in providing professional software services: consulting, software and systems development, systems integration, facilities management, training and maintenance. In order to bring to its clients individually adapted **outsourcing** solutions – ranging from technical assistance to full responsibility for running an information system – Cap Gemini Sogeti has developed a complete service offering (see diagram opposite page), which may be divided into three categories of activity, each corresponding to a very specific level of engagement.

– Professional Services and assistance:

- Consultancy mainly involves analyzing a given problem and developing possible scenarios; designing, planning and organizing information systems; implementing solutions either by developing customized software, or by adapting already-existing applications.
- Software and systems development includes basic software production, software application implementation, the design of programs to assure systems security, software conversions from one DP environment to another, etc.
- Training, which is complementary to the other activities, assists users and IT personnel (managers, development and operational staff) in handling new applications or staying on top of new technologies through the organization of seminars and other training programs.

– Systems Integration:

This refers to providing a client with a complete IT solution integrating hardware and



standard or dedicated software components (the whole most often forming a heterogeneous configuration), and with a commitment to respect previously established costs and delivery times.

– Systems Operations:

• Facilities Management means taking over all or part of a company's IT resources (hardware, software, computer centers and staff) and running this operation for a given time period and with a commitment to results.

• Maintaining existing systems – which must be continually adapted to new user demands and technological changes, and the costs of which are much more apparent – includes upgrading operating systems or applications and "regenerating" software (software re-engineering) to make it function more easily and efficiently.

A triple capability

To support these services, the group is emphasizing three types of skills among its professionals: technological command (of hardware and software), working methods (from conducting interviews to piloting large projects) and a strong knowledge of its clients' and potential clients' business sectors. The appearance of new technologies – over which the group's research and development organizations keep a very keen eye (see pages 38-39) – and the growing diversity of applications and problems to be solved, are guiding this expertise along three main tracks:

• extension of basic technical knowledge into such areas as artificial intelligence, "fuzzy" logic, object-oriented languages, portable operating systems (Unix), computer vision, multimedia and man-machine interfaces (ergonomics);

• specialization in the fields of systems architecture, data structuring, knowledge-based systems (KBS), software engineering tools, reuse of software components, heterogeneous networks and large-project management;

• command of applications specific to each of the eight principal economic sectors (finance, industry, trade, telecommunications, defense, government, information technology and science).

Users no longer buy only skills. What they buy now are solutions and results.

A constant search for innovation and quality

For company executives, being competitive means knowing how to take advantage of all opportunities arising from new technologies. In defining and implementing their strategies, it means avoiding unconfirmed procedures and techniques and distancing themselves from the competition. Integrating technological innovations at the right time implies being in permanent contact with the academic community, research laboratories, hardware manufacturers, software editors and those heading the large research programs all over the world. Actually, this current challenge represents the "rite of passage" from the world of pure research to the day-to-day realities of operational applications.

Cap Gemini Innovation

In 1984, keeping one step ahead of its clients, Cap Gemini Sogeti created a unit known as Cap Gemini Innovation, specializing in applied research. Its principal missions included: staying on the leading edge of new technologies, experimenting with and validating technical advances in the profession, and transferring skills among the teams taking part in group projects. Bringing together researchers and technicians from more than ten countries, from all the international subsidiaries of the group, this research and development policy is carried out jointly from four research centers in France, Belgium and the Netherlands. The sums invested in this activity have grown steadily since 1985, at which time they represented FF 111 million; at the end of 1991, the figure had climbed to FF 600 million. Whatever the field – knowledge engineering, software engineering, ergonomics or parallel architectures – command of the broad directions of contemporary research is imperative for participating in today's large IT projects and maintaining the group's human potential at its peak competitive level.

Strategic lines of innovation

In the course of more than 30 European research programs,* Cap Gemini Sogeti has concentrated its energies in four specific areas: software engineering, knowledge engineering, man-machine communications and new architectures.

Major advances in **software engineering** may be seen in:

- object-oriented programming, which enables computer professionals to create readily adaptable applications and easily reusable code modules based on a natural approach in which objects are used to simulate the real world; an approach representing a significant time gain in development and maintenance;
- "software factory" applications, adapted to the tools and structures of individual companies, covering software cable techniques – the "software bus," for example – around which various components are linked, and "process modelling," which describes, directs, initiates and controls all actions to be performed;
- "reverse engineering" tools – which facilitate the understanding of existing programs in order to improve maintenance – make use of conceptual graphs to prepare a "dynamic description" of the application being studied.

Three areas of expertise in which Cap Gemini Sogeti enjoys very privileged know-how are grouped under the generic term "**knowledge engineering**": expert systems (or knowledge bases) where, for the last five years,

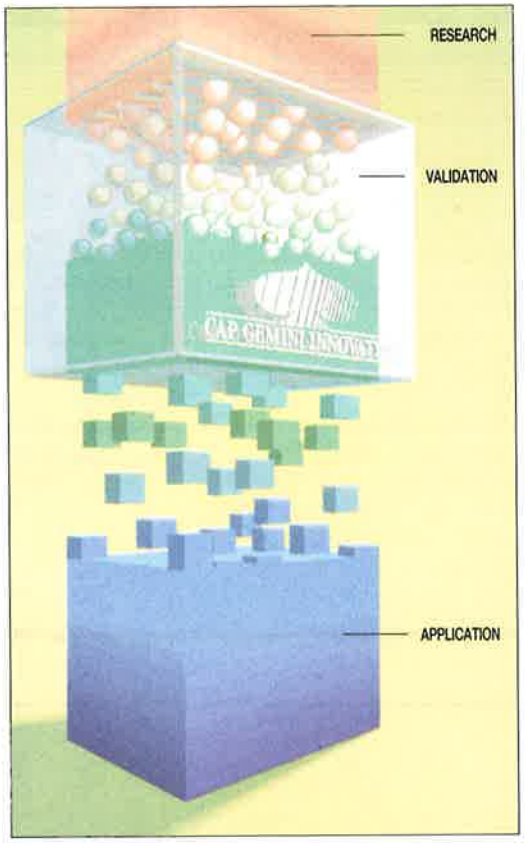
* including some of the best-known projects in the ESPRIT and EUREKA programs such as: ACKNOWLEDGE, ATMOSPHERE, ESF, KADS and SUNDIAL.

the group has been involved in both research and industrial applications; natural language processing, the first operational applications having taken place in 1990; and lastly, cooperative dialogue, a technology destined to pave the way for a real, interactive exchange between computer and user.

Man-machine communication is one of the broadest avenues of current research, as well as one in which progress is occurring most rapidly. The group is investing its energies in two specific areas:

- ergonomics, encompassing all the basic techniques needed to construct the interfaces for dynamic dialogue and modelling. Since 1986, a specialized team has been concentrating on this discipline, which represents an important competitive attraction for users.
- voice interfaces: developing a refined module for cooperative dialogue which, in the not-too-distant future, will enable a human being to carry on a conversation with a computer.

Constructing **new architectures** is the only means for increasing computer power, which will soon reach the physical limit of electronic component integration. Three lines of development exist: parallelism, neural networks and distributed systems. These technologies will make it possible to solve previously intractable problems such as self-configuring networks or the representation of imprecise knowledge according to the rules of fuzzy logic.



INFORMATION TECHNOLOGY LIFE CYCLES

Technology transfer

As illustrated in the diagram opposite, Cap Gemini Innovation brings technology to its clients' doorstep in a number of ways:

- acting as a permanent technological "watchdog," through contacts with major research centers worldwide;
- participating in national and international research programs designed to test and validate advances in technology, set standards, select the most viable operational technologies and master their implementation;
- distributing its know-how both to external users and within Cap Gemini Sogeti, through training and information or by involvement in actual client projects;
- welcoming into its ranks technicians from other group subsidiaries who would like to try their hand at different areas of research for a few years. Returning to their companies at the end of these assignments, they will be able to share their new-found expertise with their colleagues and clients.

Staying abreast of new developments in research is mandatory for those who want to participate in important IT projects today.

The group's top management gathered at Béhoust for the 1992 kick-off meeting.

An organization of international scope

As with any living organism, Cap Gemini Sogeti has continued to adapt to changes in its environment and to the changing needs of its clients. These organizational changes, however, in no way interfere with the two guiding principles which have given the group its international vitality and steered it on its successful course:

The first is a **highly decentralized structure,** in which clients and group professionals work together in the closest possible proximity. These full-charge core units then become part of larger operational groups. Throughout 1991, Cap Gemini Sogeti was organized into four such operational groups. As was the case in 1990 with the arrival of Hoskyns, an additional (fifth) group, Cap debis, was created at the beginning of 1992. It combines the operations of Cap Gemini SCS (Cap Gemini Sogeti's German subsidiary) and the professional services units of debis Systemhaus, the IT services arm of Daimler-Benz.

The second is its **general management and support teams, light in hierarchy and designed to function at peak efficiency.** At the corporate level, for example, there are three key departments: Financial and Legal; Development and Control; Communications and Human Resources. In addition, an operational support unit has been created known as Cap Gemini International Support (CGIS). Its mission is twofold:

- International Sales and Market Development. A team of high-level managers is assigned to conduct, facilitate and coordinate the group's business relationships with large multinational corporations.
- International Technical Support. As part of the group's research and development policy, a considerable investment was commited in 1991 to the new international Quality System, ***PERFORM*** (see description page 47).

The vitality of an international group

Above and beyond the economic indicators, 1991 was a year of progress and important developments in each of the major markets in which the group is present.

Germany

Just one year after its inauguration, Cap Gemini SCS – created in January 1991 from the merger of Cap Gemini Sogeti's German subsidiary and the systems integrator, SCS – is on the verge of bringing its expertise to a new partner, debis Systemhaus. The new entity, Cap debis, will employ slightly more than 3,600 people and will be Germany's number one computer services firm.

Under the terms of the agreement reached in July 1991 between Daimler-Benz and Sogeti (Cap Gemini Sogeti's parent company), it was decided to form a joint venture which would enable German clients to draw maximum benefit from the wide range of skills represented by the combined teams of the two partners.

Officially launched on January 30, 1992, Cap debis links the subsidiary companies of Cap Gemini SCS with the service and consulting activities of debis Systemhaus under a single banner. The new German organization is headed by Kaj Green, who for some time ran Cap Gemini Sogeti's Swedish operations before taking charge of the merger between Cap Gemini Sogeti and SCS. Cap debis' management team is in the process of defining an overall policy for the new group, whose basic organization remains unchanged. Anxious to avoid any risk of disrupting business, the managers will decide during the course of 1992 whether or not to modify the current structure. Once again

the determining factor will be how best to serve the needs of their clients.

Benelux

There has also been a realignment in Benelux (Belgium, the Netherlands and Luxembourg), the result of linking the activities of Cap Gemini Pandata (the group's Dutch subsidiary) and Cap Gemini Sesa Belgium to those of the Netherlands' leading computer services firm, Volmac.

This alliance, sought by the shareholders of both companies – Cap Gemini Sogeti, on the one hand and the World Software Group (WSG) on the other – is also being strongly supported by their respective management teams, who see in this arrangement a unique opportunity to:

- Give Volmac and its clients access to an international network of skills and know-how unrivalled in Europe.
- Develop the consulting and facilities management business in Benelux by tapping the resources of Gemini Consulting and Hoskyns.
- Create a new entity of more than 4,000 professionals, which will become the number one computer services firm in the Netherlands and Belgium (1991 revenues, calculated within this same structure, would have amounted to about $490 million).

U.S.

In its continuing quest to increase the proportion of its revenues derived from responsibility projects, Cap Gemini America has consolidated its teams of specialists and strengthened its consultant development programs. Among the many efforts of this kind, three are especially noteworthy:

- The Integrated Manufacturing Technologies (IMT) practice is providing solutions for all aspects of the manufacturing sector including production support, factory installation, security and control, quality control, distribution and communications. A new offering, known as "Operations Improvement Planning" (OIP), plus an analytical procedure to provide clients with business simulations that will enable them to quickly identify opportunities, have all contributed to a 60% growth rate in the IMT practice in 1991.
- The Software Engineering Productivity practice began operations in 1991. Its offering, called "Springboard," is made up of an array of software engineering tools and support services designed to help clients capitalize on their CASE investments. Springboard attempts to overcome the cultural or psychological obstacles often accompanying the implementation of this technology.
- The Conversion and Re-engineering practice – which has increased its revenues by more than 80% in one year – specializes in database migrations and conversions.

U.K.

For Hoskyns, 1991 was its first full year of affiliation with Cap Gemini Sogeti, following its arrival in the group the previous summer. Special attention was paid during the year to strengthening its ties with the various group companies. As Cap Gemini Sogeti's fourth operational group, not only has Hoskyns easily assumed its place within the organization, but its partnership contribution was very quickly established with the inauguration of the facilities management activity in France. This was achieved through the creation of a new joint company known as Cap Sesa/Hoskyns.

Combining Hoskyns proven experience in FM – the U.K. leader in this field, more than 250 contracts having been signed over the last 20 years – with the expertise of Cap Sesa, clearly provided the best approach to attacking this new French FM market, which alone represents one-quarter of IT projects in Europe. The ability to offer clients the services and know-how of the entire group is a decided competitive advantage, and FM is one of the most effective means of consolidating skills with objectives.

Cap Sesa/Hoksyns' early successes have opened the door to new revenues, long-term agreements, exposure to new skills, new ways of working and, with respect to some large accounts, to new international opportunities. All of this confirms the good sense upon which this alliance with Cap Gemini Sogeti was originally based.

France

More than in previous years, 1991 saw some profound changes in the computer services market. The key words in the new demand vocabulary are: need-generated solutions, tighter deadlines, more user-friendly applications, more flexible systems, improved maintenance

Cap Gemini Sogeti is continually adapting its organization to the ever-changing needs of its clients.

In order to become number one worldwide, a corporation must be first in every market in which it is present.

of existing assets and externalization of resources.

Cap Sesa was more than prepared to deal with these market developments. For its large users, it set up a "Client Relations" structure to extend awareness of customer needs, offer more relevant services and raise revenues among individual clients. In conjunction with the branch managers and sales representatives, those in charge of Client Relations are assigned to:

- Establish direct contact with key corporate decision-makers, with the aim of representing Cap Sesa as a whole and acting as consultants to clients in the development of their information systems.
- Circulate marketing information (reports of sales calls, etc.) using a new electronic mail system to link the sales force with clients.
- Define an "action plan" combining objectives (both qualitative and quantitative) and implementation methods, with the rules for maintaining the coherence of actions and messages.
- Mobilize within Cap Sesa the forces needed to carry out important assignments and coordinate related actions.
- Alert the company managers if the quality of their work is not up to par and may represent a risk to Cap Sesa's image.

Scandinavia

In the Nordic countries – Sweden, Denmark, Norway and Finland – efforts to strengthen the organization were undertaken in 1991, laying the groundwork for the alliance, at the beginning of 1992, with Programator and the Scandinavian subsidiaries of Cap Gemini Sogeti.

With a work force of about 2,500, Programator offers a wide range of IT services including consultancy, systems integration and facilities management – a field in which Cap Gemini Sogeti is hoping to establish a stronger Scandinavian presence.

In joining forces with Programator, Cap Gemini Sogeti is confirming its stated goal of becoming the world's number one computer services company. And to accomplish this, it must be number one in every market in which it is based. As a result of this operation, Cap Programator – with projected revenues of about SEK 3 billion in 1992 – will become the uncontested professional services leader in this region, unequalled in terms of number of locations, and able to handle all types of IT projects at both the local and international level.

All these developments have brought the group to an enviable position in the world computer services market. There are many other opportunities to be seized and responsibilities to assume. Cap Gemini Sogeti is more than ready for them.

AFFILIATED COMPANIES

Principal companies in which the group holds a minority stake:

- **CISI** (IT services and consultancy), in which Cap Gemini Sogeti holds a 36% stake, recorded revenues of FF 1,475 million in 1991.
- **SEMA Group** (IT services and consultancy), in which Cap Gemini Sogeti holds a 28.7% stake, recorded revenues of FF 4,104 million in 1991.

1991 in review

January

U.S.: Sogeti became the majority shareholder of the MAC Group, founded 28 years ago by a Harvard Business School professor. The MAC Group, headquartered in Cambridge, Massachusetts, specializes in the formulation and implementation of competitive strategies. The alliance of the MAC Group, United Research and Gamma International resulted in a new, international management consulting group called Gemini Consulting.

France: CSIH (Cap Sesa Informatique Hospitalière) was founded to provide a complete range of products and services in hospital information systems.

February

The Netherlands: Clients were invited to a concert in Groningen marking Cap Gemini Pandata Telecommunications & Services' change of address.

Denmark: As part of a European partnership, Cap Gemini Danmark, Fiat, Ferruzi, Siemens, Bang & Olufsen, along with Professor Niels Björn Andersen of the Institute for Information Technology and Economic Management in Denmark, made significant headway on a major international project whose main theme is: "Quality of Life in a Computerized Society."

March

France: The consortium formed by Bull and two Cap Sesa subsidiaries, ITMI and Cap Sesa Industrie, was selected by Sollac iron and steel works (subsidiary of Usinor Sacilor) to develop a support system based on artificial intelligence to facilitate operation of its blast furnaces. The project, Sachem, is considered to be the most ambitious industrial artificial intelligence project in Europe.

Germany: Following the purchase of SCS in July of 1990, Cap Gemini Sogeti and SCS restructured their activities in four market-oriented subsidiaries under the umbrella of the Cap Gemini SCS holding company.

April

Belgium: Cap Gemini Sesa Belgium invited managers of several major Belgian businesses to La Baule, France, for a two-day seminar on "Management and Information Systems." The session entitled "Computers: a Manager's Heaven or Hell?" was highly successful.

Italy: Cap Gemini Italia, along with the French Academy in Rome and the Pro Musicis Italia record label, invited clients to a concert at the Villa Medici in Rome.

At Cap Gemini Sogeti, 1991 cannot be explained by numbers alone. The year was marked by many events, engraved in the memories of those who experienced them.

Cap Gemini Sogeti's mission: designing, managing and coordinating IT systems on national and international assignments.

May

Europe: In order to be better prepared for the 1993 common market, BP Oil, a subsidiary of British Petroleum, decided to standardize its various national information systems in Europe. This important international IT project, dubbed European Systems Program (ESP), was entrusted to several computer service companies, including Cap Gemini Sogeti.

June

The Netherlands: An agreement signed by Cap Gemini Pandata and ECOS, a Czech computer training and consulting firm, provided training for about 20 ECOS professors in the Netherlands to familiarize them with course work at the Dutch subsidiary's Computer Training Institute.

Norway: As part of the Norwegian army's local command-based management systems, Cap Gemini Data Logic was contracted to design and develop a spare-parts and equipment tracking system and to install it in over 350 locations.

July

Germany/France: On July 23, an agreement was signed between Daimler-Benz and Sogeti by their respective chairmen, Edzard Reuter and Serge Kampf, in which the German industrial group took a 34% stake in Sogeti's capital. The deal, a truly strategic alliance in the IT services sector, will enable Cap Gemini Sogeti to consolidate its position in Europe.

U.S.: Gemini Consulting announced an agreement with ParcPlace Systems, a supplier of object-oriented application development services. The two companies will work together towards broadening the use of this technology.

Spain: Cap Gemini España was contracted to develop a four-year information technology services policy for Funditubo, the Spanish subsidiary of Saint-Gobain.

August

U.K.: Hoskyns signed a facilities management contract with London Buses Ltd. to manage its information system for a minimum of three years. London Buses, which controls the circulation of the 5,400 London city buses and their 3 million daily passengers, was thus able to focus on its core transportation business at a critical time when its development strategy required the decentralization of its one computer center to a single network connecting twelve different centers.

Sweden: Cap Gemini Logic announced the development of a new personnel management and compensation system for SVP (the Swedish

personnel and retirement authority). The system is designed to respond to requests from businesses of all sizes and all industries across the country.

September

U.K.: A share registration system was launched by the Bank of Scotland and Hoskyns. The system, christened "Artis" (Automated Registration and Taurus Interface System), uses the most advanced 4th generation language (Natural/Adabas) on DEC/VAX hardware.

Finland: Cap Gemini Suomi was subcontracted by IBM to design and implement a reservation system for the Finnish rail authority.

Italy: Cap Gemini Teleinformatica was granted a contract for the development of "Pluritel," a new public service made available to telephone subscribers by SIP (the state telephone company).

PERFORM

PERFORM is Cap Gemini Sogeti's international Quality System. Compliant with ISO (International Standards Organization) norms, ***PERFORM*** is a comprehensive set of standards, procedures, methods, techniques and tools to ensure quality on group projects – i.e., guarantee client satisfaction.

To implement each of the elements of ***PERFORM*** (see diagram below), the group companies now have access to the following components:

- Standards – defining the required procedures applicable to the operational management of projects.
- Methods (or life cycles) – an ordered set of tasks defining the working procedures to be carried out.
- Techniques – state-of-the-art practices to accomplish the tasks, incorporating the available technology and working processes.
- Tools – technical support for performing tasks according to specified techniques (hardware, software, CASE tools, documentation) from implementation to training.

The outcome of a process launched at the beginning of 1990, ***PERFORM*** borrows the best features of methodologies that had previously been in use throughout the group: Expert in France, SDM in the Netherlands, Prism in the U.K., Logic in Scandinavia and PQS in the U.S. This new overall system is intended to facilitate the conduct of multinational projects, technical audits of these projects, reuse of some software modules, productivity of the development teams and control of risks.

Technology looks after almost everything – from crop cultivation to automobile manufacture to telephone networks.

October

The Netherlands: European Combined Terminals (ECT), Europe's leading container-handling company, began installation of a highly sophisticated maritime terminal in Rotterdam, the world's largest port. Cap Gemini Pandata was chosen to design and develop the new IT systems for this project.

France: Cap Sesa Telecom was assigned by France Telecom to implement an expert support system for telephone network maintenance known as Samura. Using a knowledge base of graphics and documentary references, the system allows for over 120 breakdowns to be identified, analyzed, diagnosed and repaired.

Thailand: IGN (National Geographic Institute) and Cap Sesa installed a Multiscope satellite image processing system in Thailand to survey poppy cultivation.

November

Commonwealth of Independent States: LADA, the automobile manufacturer from the former Soviet Union, entrusted Cap Gemini SCS (Germany) with the implementation of a production control system in its Togliatti factory (Ukraine). Designed to automate the metal-casting process, the system should be operational by mid-1995. It will chiefly connect various check points on the assembly line via a local area network.

Germany: Cap Gemini SGS was awarded a contract by EVG (Erdgasversorgungsgesellschaft), the German natural gas distributor, to develop and install a natural gas network control system in the new German states of Thuringe, Saxony-Anhalt and West Saxony. The software system, known as "GAMOS" (GAs pipeline MOnitoring System), includes a real-time database and man-machine interface with full graphic color displays.

December

Europe: On December 1, the CSCE (Conference for Security and Cooperation in Europe) took possession of its own communication network, which connects all 38 of its member-countries. Under the sponsorship of the Dutch Ministry of Foreign Affairs, prime contractorship of this project was awarded to Cap Gemini Sogeti through the intermediary of its Dutch subsidiary, Cap Gemini Pandata.

U.S.: The Washington, D.C. Branch of Cap Gemini America was chosen as prime contractor to develop a Unix-based, voice recognition system for a national broker of federally insured mortgages.

A motivated team of managers and professionals

Where people make the difference

A company may have a dynamic, well-adapted organization, all of the resources necessary for its development, well thought-out work methods and an environment conducive to the exchange of experience which guarantees the quality and durability of its services; but that is simply not enough. In the services sector, it is the men and women working in the company who really count.

After a 40% increase in the work force in 1990, 1991 saw a stabilization in the number of employees. On December 31, 1991, they totalled just over 17,000.

These men and women are selected through a rigorous recruitment process and significant investment is made to train them on site, in their home countries. Of course this training includes the use of new IT techniques such as object-oriented programming, expert systems and relational databases. But it also includes the study of interpersonal relations, which mark the difference between professionals from one service company to another.

For example, a French subsidiary of Cap Sesa organized a special training program for over 100 managers and project leaders consisting of ten days spread out over the year. This program, which focused on management techniques, communication, client relations, time management and team leadership, provided an indispensable complement to technical training sessions and experience in the field.

Where competence counts

Cap Gemini Sogeti is a highly decentralized, international company; as such, the emphasis has always been on recognizing individual expertise and promoting exchanges.

The group has thus increased its capacity to develop the potential of its people through:

- technical publications *(Systems Review, Cogitas Special Report, Expert, Cap Gemini Business*, etc.), which keep employees abreast of the most outstanding activities within the group;
- reference databases, offering useful descriptions and information relative to these activities;
- "competence centers," which provide the line managers with skills related to a given technique or application. These centers include the CIM software products support center (CSPP), the conversion centers (Munich and Paris), the departments of CGIS, etc.

To ensure the exchange of its individual and collective talents, the group has also initiated procedures and actions designed to:

- help the branches and project teams share their expertise and experience;
- foster career development through training in new disciplines and reinforcement of professional skills;
- generate geographic mobility and openness to change through a variety of projects, assignments and responsibilities;
- create a spirit of unity, a respect for common values and identification with a well-defined corporate culture.

Cap Gemini Sogeti University

Cap Gemini Sogeti University was first created with the manager in mind; its goals are to provide the tools for optimum performance, to prepare the manager to adapt to a constantly changing environment, and to nuture him or her for other responsibilities in the future. The University was designed to offer all managers in the group a continuing education tailored to their specific functions and to new developments in their field, whether technical, financial, professional, commercial or human.

For a manager, training means adapting to changes in order to control his or her own professional progress.

But there are other equally important reasons for the University: to take advantage of the incredible wealth of experience and expertise of an international group with the stature of Cap Gemini Sogeti, accumulated over nearly 25 years; and to profit from the highly specific nature of its business by creating an internal training center at the corporate level, available to all group members.

Forming a solid team of able managers

An exceptional setting, as much in its natural decor as in its interior design, Cap Gemini Sogeti University has two main objectives:

- to provide a **forum for the continuing education** of the group's present and future managers;
- to establish **a place of exchange and meeting** among people of different cultural or educational backgrounds, and of various managerial levels.

Cap Gemini Sogeti University was designed for informal groupwide exchanges, keeping in mind the comfort and professional well-being of all participants. Because if there is one element critical to the group's development, it is this: the need to build a solid team of able managers.

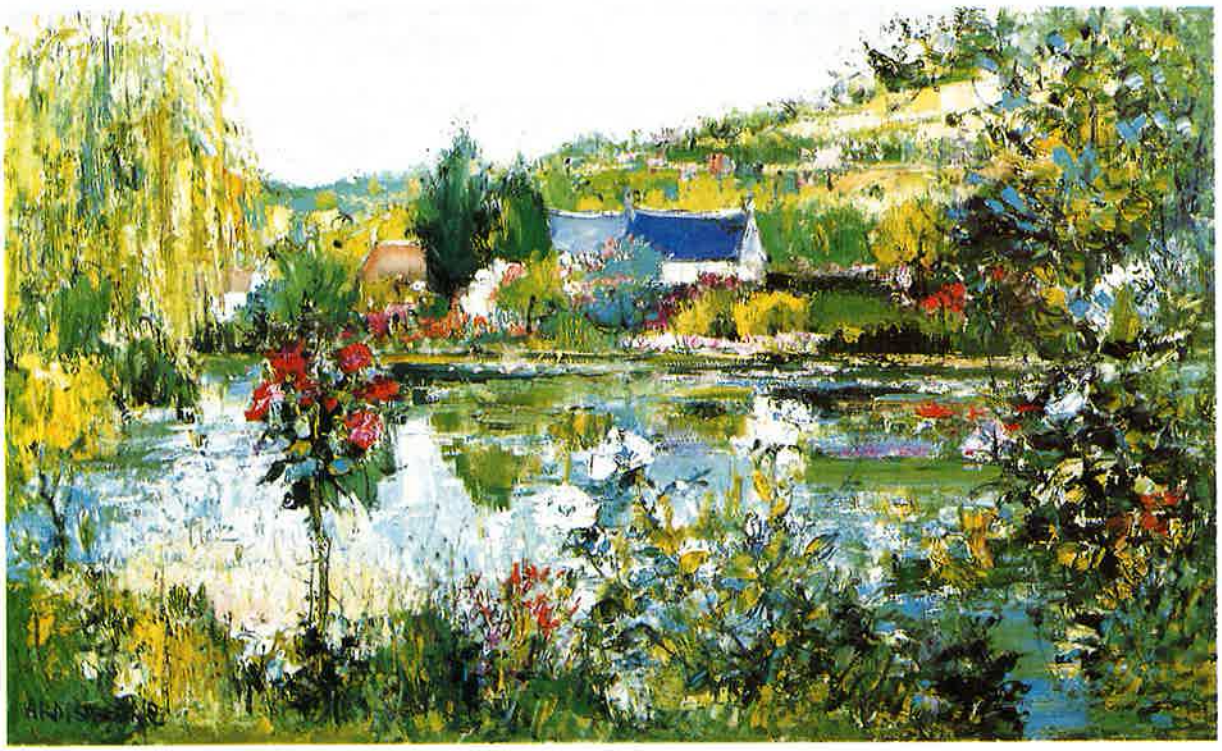
As a sign of its commitment to this project, Cap Gemini Sogeti has completely renovated the Béhoust property in Yvelines, 28 miles (45 kilometers) southwest of Paris. Managers are invited to attend seminars or workshops throughout the year according to their specific needs. Some group managers have permanent assignments at the University, others come regularly to share their experience with their colleagues and outside speakers frequently give lectures there.

This is in line with the vital challenge that Cap Gemini Sogeti has taken on: to populate the entire group with efficiency-oriented managers, who believe in and want to promote its values, and who have a strong desire for personal enrichment through contact with an international culture.

Group Values

What brings the managers and professionals of the group together is much more than computer expertise, ambition, or economic performance. It is also the basic values upon which Cap Gemini Sogeti was founded; values which it strives to instill and reaffirm during minor and major events alike, in new and senior group members, and even publicly in its Annual Report.

1. Honesty, referring simultaneously to integrity, sincerity, a sense of honor, keeping one's



Giverny

word, fulfilling one's commitments, rejecting all disloyal methods designed to facilitate winning a contract or gaining some personal advantage.

2. Solidarity, meaning team spirit, friendship, loyalty, openness, the principle of universality, selflessness.

3. Freedom, or sovereignty, meaning independence of spirit, judgment and action, a sense of initiative and creativity; also tolerance and respect for others, their culture and customs. The respect without which the group would not be what it is today and without which the many mergers carried out over the past years would not have been so successful.

4. Daring is the taste for entrepreneurship, for taking risks; the competitive spirit; the periodic, systematic reassessment of where you are and where you are going. Daring must be accompanied by a certain wisdom as well.

5. Confidence: Cap Gemini Sogeti has always had confidence in its members, sought to give them responsibility, chosen those who were capable of choosing and then required them to choose. Cap Gemini Sogeti is a company in which the principle of "subsidiarity" – whereby decisions are made as close as possible to those who have to implement them – has always been applied.

6. Simplicity means the very opposite of arrogance, pretension and affectation. Simplicity is discretion, real modesty, spontaneity, familiarity (maybe even toughness) in relationships, accompanied by good taste, sincerity, refinement (not having to call attention to oneself in order to be recognized).

7. Fun: Of course, fun, which Plato and Aristotle described as a driving factor in human behavior. It is the pleasure you feel in the morning when you find yourself eager to get to the office; being proud of what you do, looking for quality in everything: your work environment, professional relationships, proposals you present to clients. This pleasure must be earned and yet it has no price.

"When we are forced to make difficult choices, we fall back on the group's fundamental values."
(Serge Kampf)

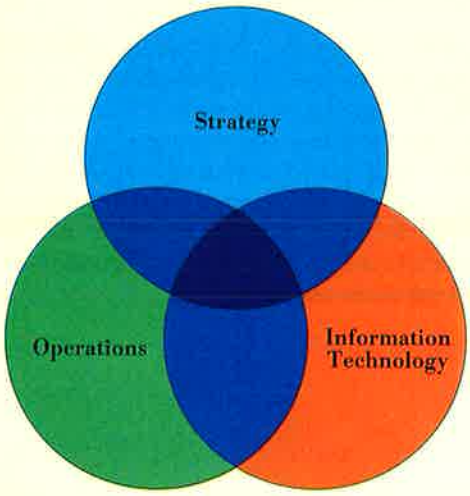
GEMINI

The vision that created Gemini Consulting* under the Sogeti umbrella in January 1991 is being validated in the world marketplace. As Gemini helps its clients rewrite the rules of their own industries – and in the process dominate them – so Gemini is rewriting the rules of the management consulting industry, and beginning to dominate it.

Indeed, Gemini no longer sees itself as being in the business of management consulting; it is in the business of **business transformation.** The "fix it" incremental mentality of the 1970s is no longer enough to propel a company past its competitors into new competitive space. Gemini Consulting is not in the "fix it" business. There are a number of consulting firms around the world capable of helping corporations make incremental changes in quality, customer service, cycle time, cost, etc. That is not what Gemini does.

Gemini helps its clients formulate and take ownership of new corporate visions. It helps its clients achieve these visions (or "strategic intent") in ways that are uniquely suited to their own strengths, skills and core competences and linked to market-based opportunities. The client's strategic intent must always represent a stretch of its resources, but it should also be an intent that is achievable by finding creative new ways to leverage and orchestrate resources and to build on core competences.

THE "BUSINESS TRANSFORMATION" CONCEPT



Once Gemini has helped the client shape ambitious, achievable new goals, it then serves as a catalyst to institutionalizing these aspirations in the client culture and ensuring – unlike so many corporate initiatives – that this one does not simply "run out of steam." To carry out its new role of business transformer, Gemini integrates several disciplines that are central to managing complex, challenged organizations: **strategy, operations and information technology.** Its uniquely integrated practice produces the kind of synergy that accelerates the business transformation process, generating rapid, measurable results for its clients.

For client companies to benefit and profit from the opportunities ahead, they must tap the talents of their people, galvanize their ambitions and create an organization-wide basis for continuous change, innovation, excellence, learning and discovery.

Continuous change is practically the only certainty the future holds. No competitive advantage is sustainable for long in this new world of rapidly shifting technologies, geopolitical boundaries and market realities. The quest for sustainable competitive advantage has been replaced by a more dynamic quest for what is sometimes referred to as the "nimbleness" advantage: companies will succeed by continually reinventing themselves. Success, therefore, will depend on the ability to be swifter than one's competitors, constantly learning and using that learning to create new ways to compete and destabilize competitors on an ongoing basis.

Gemini is uniquely positioned to help corporations from all industries and all parts of the globe claim their futures in this new, fast-paced, demanding world. Gemini shows clients how to identify and exploit their core strengths with

The sea at Tragas

agility and speed; to do it in a way that engages and rewards their people; to learn how to turn around and make other changes immediately and, in so doing, to win.

Gemini is continually redefining itself as it helps its clients redefine and reinvent their own futures. As the firm helps clients nuture a climate of continuous learning, creativity and innovation, it works hard to nuture the same climate at Gemini. As it works hard to help clients manage the many challenges and opportunities they face, it works hard to manage its own. As Gemini's clients surpass the competition in their respective industries, so Gemini is surpassing its own competition – and rewriting the rules of management consulting.

AFFILIATED COMPANY

Gemini Consulting has taken over Cap Gemini Sogeti's former 49.2% stake in the Bossard Group. Specialists in organizational consulting, Bossard reported 1991 revenues of FF 780 million.

* Gemini Consulting, a Sogeti company, is legally, organizationally and culturally separate from Cap Gemini Sogeti. The two firms work together closely when there are clients whose best interests are served by combining the complementary talents of Gemini and Cap Gemini Sogeti. Gemini Consulting has a professional staff of approximately 1,000 and 1991 revenues of $270 million.

Cap Gemini Sogeti Phone Directory

Cap Gemini Sogeti Holding Company

Corporate Headquarters: Grenoble
3, rue Malakoff - B.P. 206
38005 Grenoble Cedex 1
Tél. : 33 76.59.50.00

General Management : Paris
Place de l'Etoile - 11, rue de Tilsitt
75017 Paris
Tél. : 33 (1) 47.54.50.00

Other Locations in France

Paris	**Cap Gemini Europe**	**33 (1) 47.54.52.00**
	Cap Gemini International Support	**33 (1) 47.54.52.00**
	Cap Sesa	**33 (1) 47.54.52.00**
	Cap Gemini Sogeti University	33 (1) 30.88.38.38
	Cap Gemini Innovation	33 (1) 40.54.66.66
	Cap Sesa Défense	33 (1) 49.00.40.00
	Cap Sesa Exploitation	33 (1) 40.24.10.10
	Cap Sesa Finance	33 (1) 42.93.22.00
	Cap Sesa Formation	33 (1) 43.46.95.00
	Cap Sesa Hoskyns	33 (1) 47.54.52.00
	Cap Sesa Industrie	33 (1) 49.10.51.00
	Cap Sesa Informatique Hospitalière	33 (1) 42.79.51.07
	Cap Sesa Maintenance	33 (1) 47.62.72.00
	Cap Sesa Régions	33 (1) 43.20.13.81
	Cap Sesa Télécom	33 (1) 49.00.40.00
	Cap Sesa Tertiaire	33 (1) 49.55.99.00
	AD Consultants	33 (1) 47.54.58.58
	Copernique	33 (1) 30.82.50.00
	ITMI	33 (1) 42.79.52.44
	Logista	33 (1) 47.76.21.40
	SYSIF	33 (1) 47.74.73.26
Annecy	Cap Sesa Région Rhône-Alpes	33 50.33.56.17
Bayonne	ITMI	33 59.55.10.01
Bordeaux	Cap Sesa Exploitation	33 56.36.65.41
	Cap Sesa Informatique Hospitalière	33 56.07.29.99
	Cap Sesa Région Sud-Ouest	33 56.46.70.00
Brest	Cap Sesa Région Ouest	33 98.41.45.44
Caen	Cap Sesa Région Nord	33 31.94.51.20
Clermont-FD	Cap Sesa Région Rhône-Alpes	33 73.27.44.88
Grenoble	Aptor	33 76.90.20.03
	Cap Sesa Région Rhône-Alpes	33 76.90.01.02
	Cap Gemini Innovation	33 76.76.47.47
	ITMI	33 76.90.33.81
	Sogeti	33 76.59.50.00
Le Mans	Cap Sesa Région Ouest	33 43.28.11.23
Lille	Cap Sesa Exploitation	33 20.45.99.18
	Cap Sesa Région Nord	33 20.72.95.09
Lyon	Cap Sesa Exploitation	33 72.74.03.26
	Cap Sesa Région Rhône-Alpes	33 78.62.20.41
	CSPP	33 72.44.30.07
	Cap Sesa Informatique Hospitalière	33 78.00.02.14
	Sogeti Financial Management	33 78.62.20.44
Marseille	Cap Sesa Région Méditerranée	33 91.25.11.00
Metz	Cap Sesa Région Est	33 87.37.11.23
Montpellier	Cap Sesa Région Méditerranée	33 67.22.44.13
Nancy	Cap Sesa Région Est	33 83.44.44.88
Nantes	Cap Sesa Exploitation	33 40.69.66.66
	Cap Sesa Région Ouest	33 40.47.80.23
Nice	Cap Sesa Région Méditerranée	33 93.21.01.41
Orléans	Logista	33 38.54.91.91
	Cap Sesa Région Ouest	33 38.53.86.50
Pau	Cap Sesa Région Sud-Ouest	33 59.84.12.23
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Toulouse	Cap Sesa Exploitation	33 61.30.48.30
	Cap Sesa Région Sud-Ouest	33 61.31.52.00
	ITMI	33 61.39.28.29
Tours	Cap Sesa Région Ouest	33 47.20.67.67
Valence	Cap Sesa Région Rhône-Alpes	33 75.42.56.19

Other European Locations

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Brussels	**Cap Gemini Sesa Belgium**	**32 (2) 770.00.53**
	Cap Gemini Innovation	**32 (2) 770.03.43**
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Hojbjerg	Cap Gemini Techno Logic	45 (86) 274.411
Copenhagen	Sypro Copenhagen AS	45 (33) 155.888
FINLAND		
Espoo	**Cap Gemini Suomi**	**358 (0) 455.3455**

GERMANY

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Groß Gusborn	Cap debis Curadata	49 (5865) 90.0
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	SCS Personalberatung	49 (40) 354.771
	Cap debis Becom	49 (40) 53103.0
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	Cap debis Engineering	49 (711) 972.2083
	Cap debis KSP	49 (711) 972.0
	Cap debis Training	49 (711) 972.2211
Munich	Cap Gemini Sogeti International Support	49 (89) 519.910
	Cap debis Industrie	49 (89) 54750.0
Münster	Cap debis Orga-Soft	49 (251) 9782.201
Riemerling	Cap debis IAS	49 (89) 607.993
Weinheim	Cap debis MEB	49 (6201) 609.180

IRELAND

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Dublin	Insight Software Ltd	353 (1) 613.266
	Vector Software Ltd	353 (1) 619.056

ITALY

Genoa	Cap Gemini Industria Spa	39 (10) 642.30.41
Milan	**Cap Gemini Italia**	**39 (2) 542.31**
	Cap Gemini Industria Spa	39 (2) 261.01.51
	Cap Gemini Servici Spa	39 (2) 542.31
La Spezia	Cap Gemini Sesa Spa	39 (187) 513.542
Naples	Cap Gemini Sesa Spa	39 (81) 780.80.43
Rome	Cap Gemini Italia Spa	39 (6) 225.931
	Cap Gemini Sesa Spa	39 (6) 225.931
	Cap Gemini Industria Spa	39 (6) 503.66.71
	Cap Gemini Servizi Spa	39 (6) 225.931
	Cap Gemini Industria Spa	39 (6) 225.931
	Cap Gemini Teleinformatica	39 (6) 231.02.70
S. Lazzaro di Savena	Cap Gemini Industria Spa	39 (51) 625.52.80
Syracuse	Cap Gemini Servici Spa	39 (931) 463.565
Turin	Cap Gemini Industria Spa	39 (11) 669.09.33
	Cap Gemini Servizi Spa	39 (11) 650.46.65
	Cap Gemini Industria Spa	39 (11) 650.46.65
	Artis	39 (11) 812.41.10

LUXEMBOURG

Luxembourg	Cap Gemini Sesa Belgium	32 (352) 441.087
	Cap Sesa Région Est	32 (352) 484.243

THE NETHERLANDS

Amstelveen	**Hoskyns Group**	**31 (20) 436.116**
Groningen	Cap Gemini Pandata Telecom	31 (50) 272.070
Nieuwegein	Cap Gemini Pandata Public	31 (3402) 969.11
	Cap Gemini Pandata Informatica Institute	31 (3402) 969.11
	Hoskyns Group PLC	31 (3402) 419.44
Rijswijk	Cap Gemini International Support	31 (70) 395.71.71
	Cap Gemini Pandata Industrie	31 (70) 395.71.73
	Cap Gemini Pandata Public/Telecom	31 (70) 395.71.71
Utrecht	**Cap Gemini Pandata**	**31 (30) 929.211**
	(Holding)/Finance	31 (30) 929.211
	Informatica Institute	31 (30) 929.211
	Cap Gemini Pandata Handel, Distributie & Transport	31 (30) 929.211
Veldhoven	Cap Gemini Pandata Industrie	31 (40) 586.160
	Cap Gemini Pandata Handel, Distributie & Transport	31 (40) 586.180
Zwolle	Cap Gemini Pandata Industrie	31 (38) 286.444
	Cap Gemini Pandata Public	31 (38) 286.400

NORWAY

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Fredrikstad	Cap Gemini Data Logic	47 (9) 34.08.99
Oslo	**Cap Gemini Data Logic**	**47 (2) 42.07.60**
Skien	Cap Gemini Data Logic	47 (3) 52.75.45
Stavanger	Cap Gemini Data Logic	47 (4) 52.29.35
Tiller	Cap Gemini Data Logic	47 (7) 88.89.66
Tonsberg	Cap Gemini Data Logic	47 (33) 18.711

SPAIN

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Madrid	**Cap Gemini España**	**34 (1) 261.3705**

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Eskilstuna	Cap Gemini Logic	46 (16) 120.030
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	Sypro	46 (31) 496.940
Jönkoping	Cap Gemini Logic	46 (36) 190.840
Karlstad	Cap Gemini Logic	46 (54) 115.530
Kista	Cap Gemini Logic Techno	46 (8) 750.74.50
Linköping	Cap Gemini Logic Industri	46 (13) 114.220
Lünd	Sypro	46 (46) 168.540
Malmö	Cap Gemini Logic Finans	46 (40) 772.10
Orebro	Cap Gemini Logic	46 (19) 105.595
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	Cap Gemini Logic Accept Data	46 (8) 666.2500
	Cap Gemini Logic Finans	46 (8) 666.2500
	Cap Gemini Logic Industri/Logic Service	46 (8) 700.2200
	Cap Gemini Logic Techno	46 (8) 300.710
	Sypro AB/Sypro ADS	46 (8) 600.5050
	Syprocon ADB Konsult AB	46 (8) 600.3216
Sundsvall	Cap Gemini Logic Service	46 (60) 125.540
Umea	Cap Gemini Logic	46 (90) 125.530
Västeras	Cap Gemini Logic	46 (21) 303.090
	Sypro	46 (21) 137.265

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Bern	Cap Gemini Suisse	41 (31) 46.01.31
Brugg	Sypro System Development AG	41 (56) 42.42.76
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	Cap Gemini Suisse (branch)	41 (22) 47.88.00
	Cap Gemini Exploitation	41 (22) 788.21.88
Lausanne	Cap Gemini Suisse	41 (21) 26.31.33
Zurich	Cap Gemini Suisse	41 (1) 242.28.26

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Haywards Heath	Hoskyns Group plc	44 (444) 44.1662
Birmingham	Hoskyns Group plc	44 (21) 333.3536
	Hoskyns Group plc	44 (21) 328.8200
Bournemouth	Hoskyns Group plc	44 (202) 299.399
Glasgow	Hoskyns Insight	44 (41) 221.942
Greenford	Hoskyns Group plc	44 (81) 578.5571
London	**Hoskyns Group plc (head office)**	**44 (71) 434.2171**
	Hoskyns Group plc	44 (71) 735.0800
	Hoskyns Group plc	44 (71) 828.7878
	Hoskyns Group plc	44 (71) 251.2128
	The Instruction Set	44 (71) 482.2525
	Hoskyns Insight	44 (71)735.0800
Peterlee	Elfton Control Computer System Ltd	44 (91) 518.0078
Richmond	Hoskyns Insight	44 (81) 940.8070
Sale	Hoskyns Group plc	44 (61) 969.3611
Southampton	Hoskyns Group plc	44 (703) 222.508
Whyteleafe	Hoskyns Group plc	44 (883) 623.355
Winchester	Hoskyns GIS	44 (62) 844.188
Yiewsley	CGS UK Ltd	44 (895) 444.022

Locations in the United States
Cap Gemini America

Corporate Headquarters (New York)			**1 (212) 944.6464**
Finance & Accounting (Holmdel)			**1 (908) 946.8900**
Akron	1 (216) 996.7300	Kansas City	1 (913) 451.9600
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Cranford	1 (908) 272.7950	Philadelphia	1 (215) 668.4626
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Houston	1 (713) 622.0105	Washington DC	1 (703) 734.1511
		Youngstown	1 (216) 743.4200

Affiliated Companies

FRANCE	
Bossard Group	33 (1) 47.76.42.01
CGIP	33 (1) 42.85.30.00
CISI	33 (1) 49.03.95.00

Additional European Locations

THE NETHERLANDS		
Utrecht	Volmac	31 (30) 52.65.26
SWEDEN		
Bromma	Programator	46 (8) 799.35.00

Gemini Consulting

HEADQUARTERS		
U.S.	Morristown, NJ	1 (201) 285.9000
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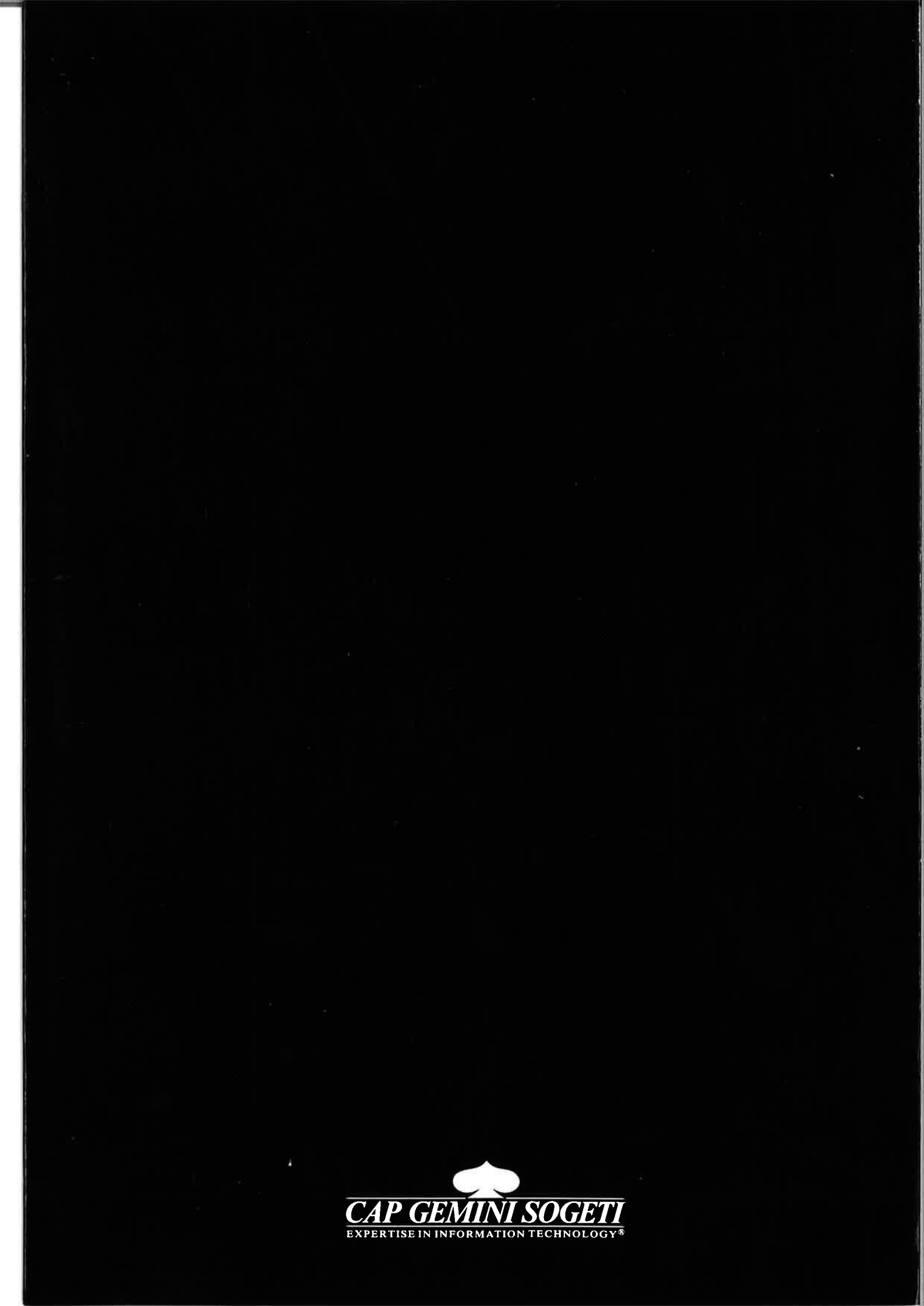
Yolande Ardissone's joyous landscapes are a constant source of pleasure. Her spacious compositions, bringing a chaotic world into focus, are characterized by vitality and candor, precision and clarity, and a complete mastery of her medium — tapering off with a brush stroke here, flattening out her surface with a palette knife there.

Born in Normandy in 1927, Ardissone belongs to the school of painting known as pictorial classicism, although a hint of impressionism is blended into her work as if to capture a fleeting moment in time and space.

Reproductions of these works were generously made available by the Wally Findlay Gallery (2 avenue Matignon, 48 avenue Gabriel, 75008 Paris). Those appearing in these pages were selected by Cap Gemini Sogeti.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